

## APPENDIX F

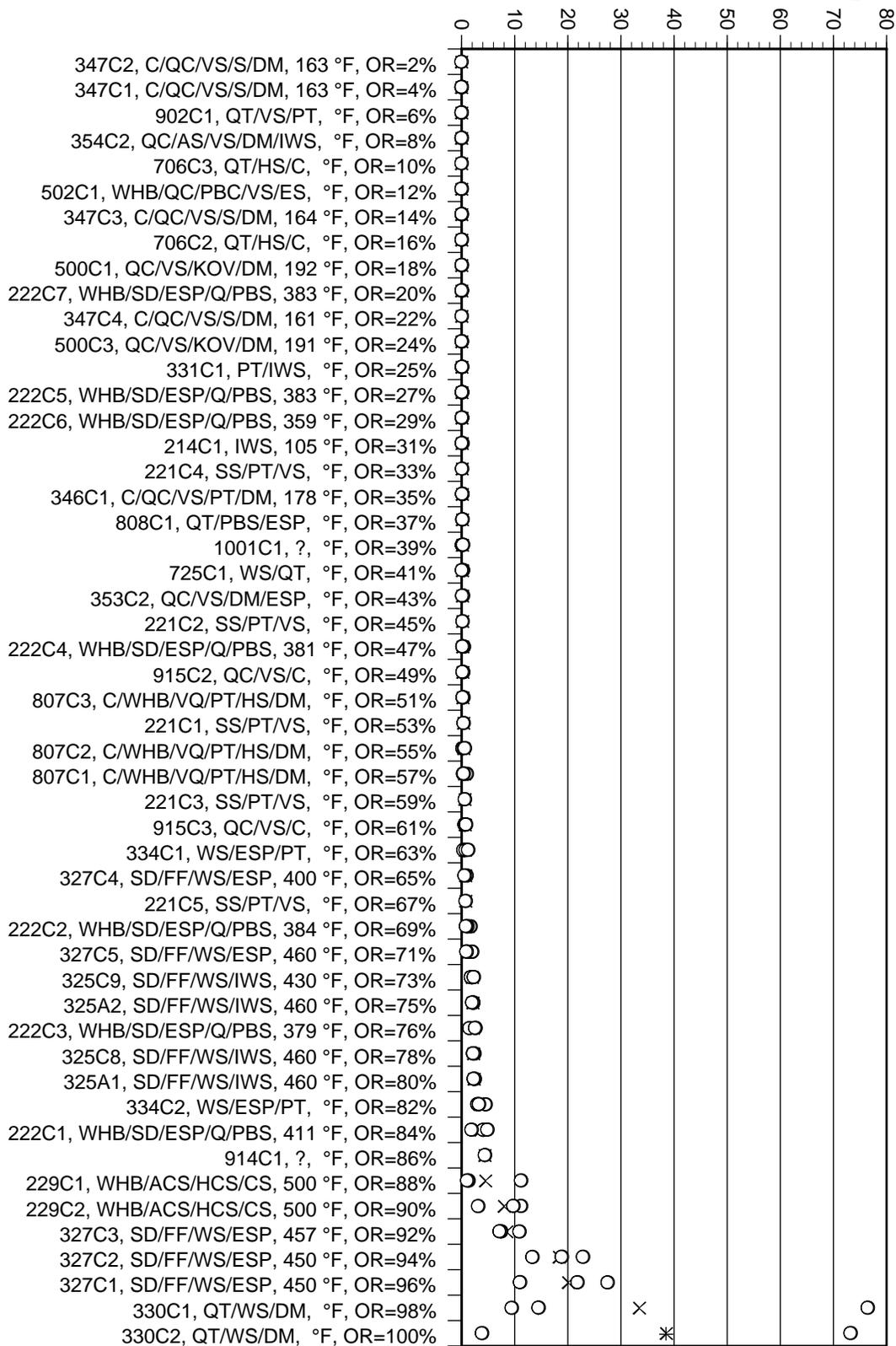
### ENTIRE SOURCE CATEGORY AND MACT FLOOR 6% EXPANDED MACT UNIVERSES PLOTS BY HAP, SOURCE TYPE, AND CONDITION ID

Following are plots of the entire universe as well as MACT 6% floor expanded universe, for incinerators, cement kilns, and light weight aggregate kiln, for each HAP. They are ranked by condition average. They are arranged in the order of:

- |     |                            |  |
|-----|----------------------------|--|
| (1) | PCDD/PCDF TEQ              |  |
|     | Incinerators               | Entire universe<br>6% MACT floor expanded universe |
|     | Industrial kilns           | Entire universe<br>6% MACT floor expanded universe |
| (2) | Particulate matter (PM)    |  |
|     | Incinerators               | Entire universe<br>6% MACT floor expanded universe |
|     | Cement kilns               | Entire universe<br>6% MACT floor expanded universe |
|     | LWAKs                      | Entire universe<br>6% MACT floor expanded universe |
| (3) | Mercury (Hg)               |  |
|     | Incinerators               | Entire universe<br>6% MACT floor expanded universe |
|     | Cement kilns               | Entire universe<br>6% MACT floor expanded universe |
|     | LWAKs                      | Entire universe<br>6% MACT floor expanded universe |
| (4) | Semi volatile metals (SVM) |  |
|     | Incinerators               | Entire universe<br>6% MACT floor expanded universe |
|     | Cement kilns               | Entire universe<br>6% MACT floor expanded universe |
|     | LWAKs                      | Entire universe<br>6% MACT floor expanded universe |
| (5) | Low volatile metals (LVM)  |  |
|     | Incinerators               | Entire universe<br>6% MACT floor expanded universe |
|     | Cement kilns               | Entire universe                                    |

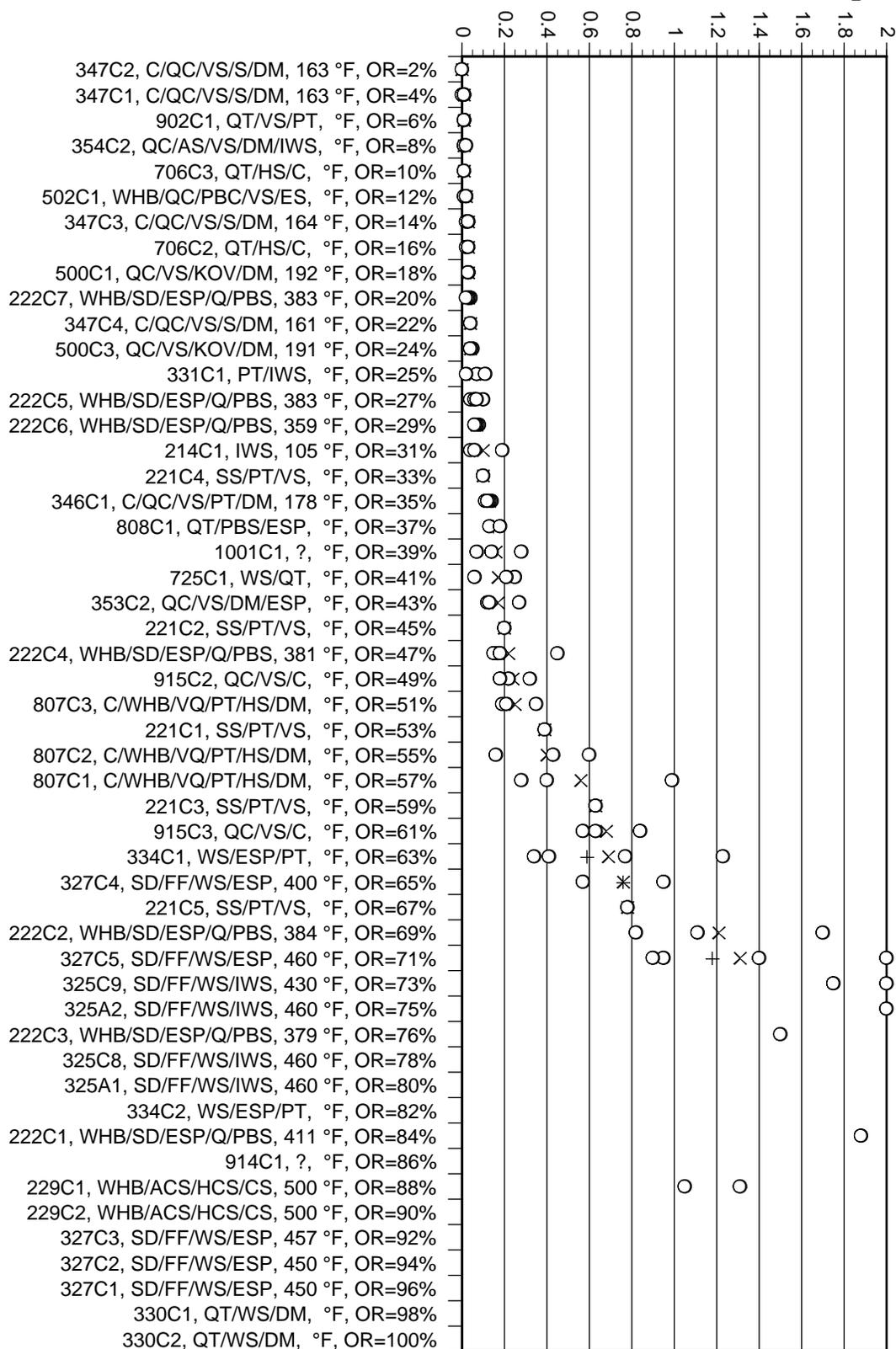
	LWAKs	6% MACT floor expanded universe Entire universe 6% MACT floor expanded universe
(6)	Total chlorine	
	Incinerators	Entire universe 6% MACT floor expanded universe
	Cement kilns	Entire universe 6% MACT floor expanded universe
	LWAKs	Entire universe 6% MACT floor expanded universe
(7)	Hydrocarbons (HC)	
	Incinerators	Entire universe (run average) Entire universe (maximum hourly rolling average)
	Cement kilns (main)	Entire universe (run average) Entire universe (maximum hourly rolling average)
	Cement kilns (bypass)	Entire universe (run average) Entire universe (maximum hourly rolling average)
	LWAKs	Entire universe (run average) Entire universe (maximum hourly rolling average)
(8)	Carbon monoxide (CO)	
	Incinerators	Entire universe (run average) Entire universe (maximum hourly rolling average)
	Cement kilns (main)	Entire universe (run average) Entire universe (maximum hourly rolling average)
	Cement kilns (bypass)	Entire universe (run average) Entire universe (maximum hourly rolling average)
	LWAKs	Entire universe (run average) Entire universe (maximum hourly rolling average)

PCDD/PCDF TEQ (ng/dscm @ 7% O<sub>2</sub>)



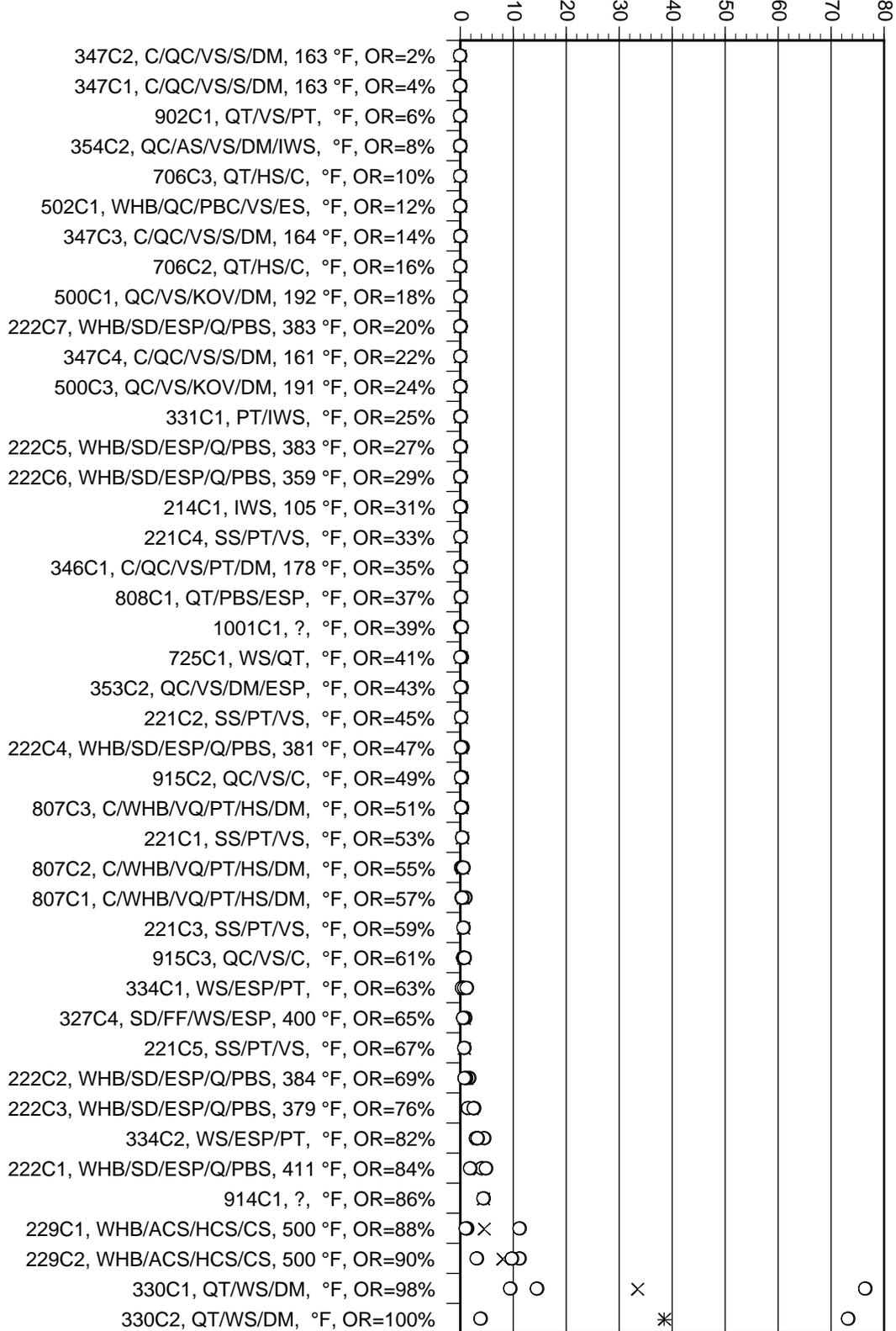
PCDD/PCDF TEQ -- Incinerators -- Entire Universe

PCDD/PCDF TEQ (ng/dscm @ 7% O<sub>2</sub>)



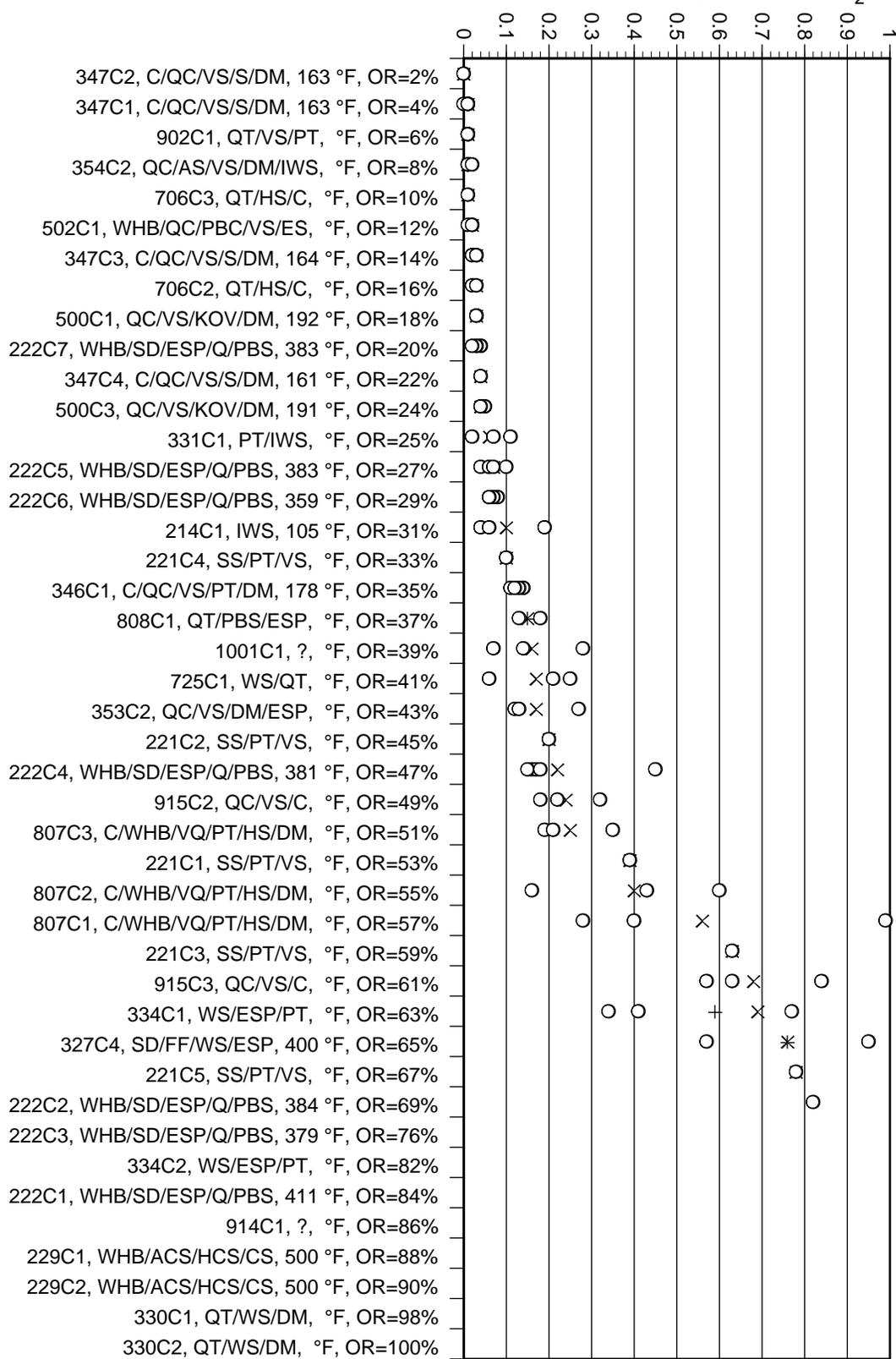
PCDD/PCDF TEQ -- Incinerators -- Entire Universe

PCDD/PCDF TEQ (ng/dscm @ 7% O<sub>2</sub>)



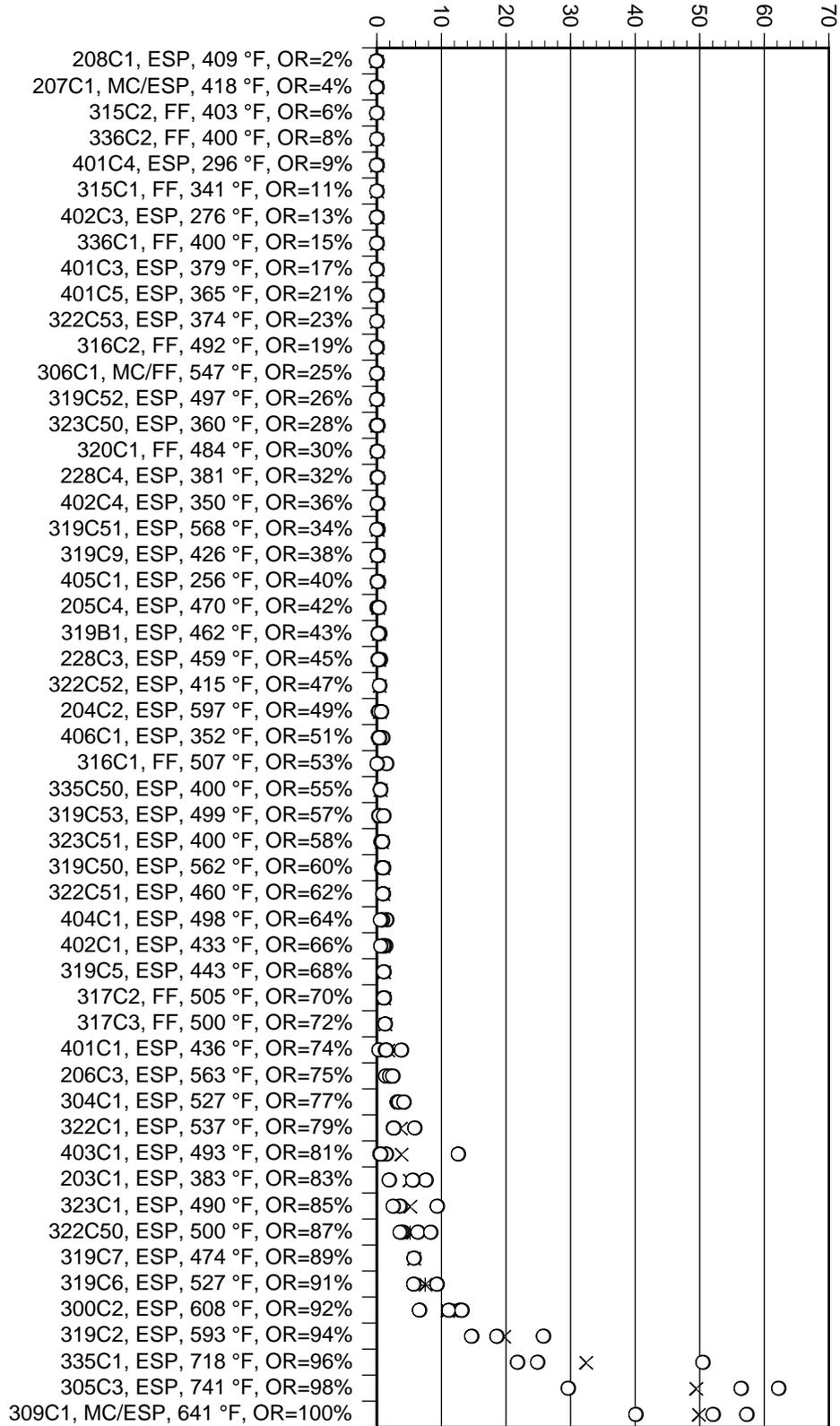
PCDD/PCDF TEQ -- Incinerators -- 6% MACT Expanded Universe

PCDD/PCDF TEQ (ng/dscm @ 7% O<sub>2</sub>)



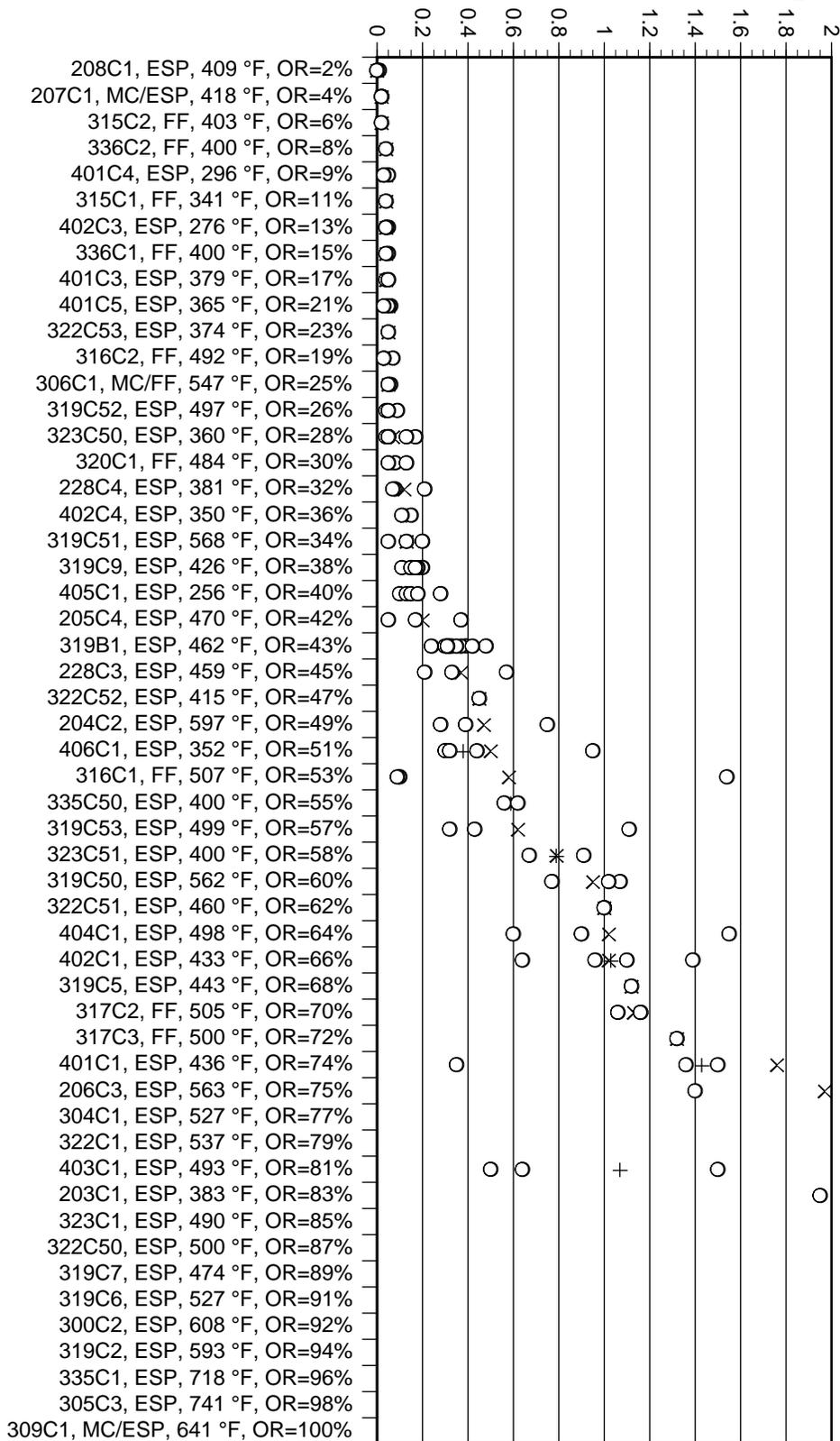
PCDD/PCDF TEQ -- Incinerators -- 6% MACT Expanded Universe

PCDD/PCDF TEQ (ng/dscm @ 7% O<sub>2</sub>)

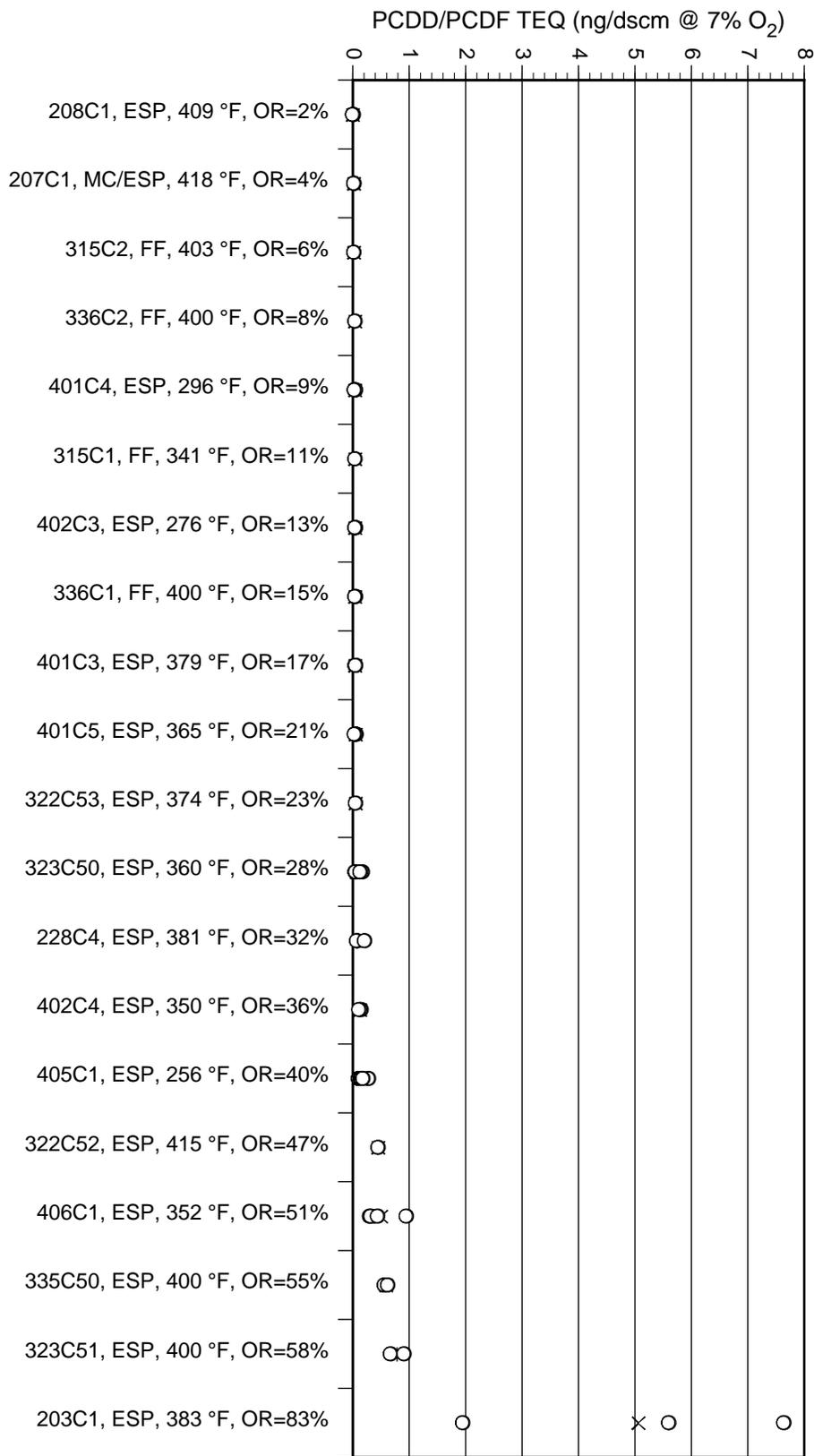


PCDD/PCDF TEQ -- Industrial Kilns -- Entire Universe

PCDD/PCDF TEQ (ng/dscm @ 7% O<sub>2</sub>)

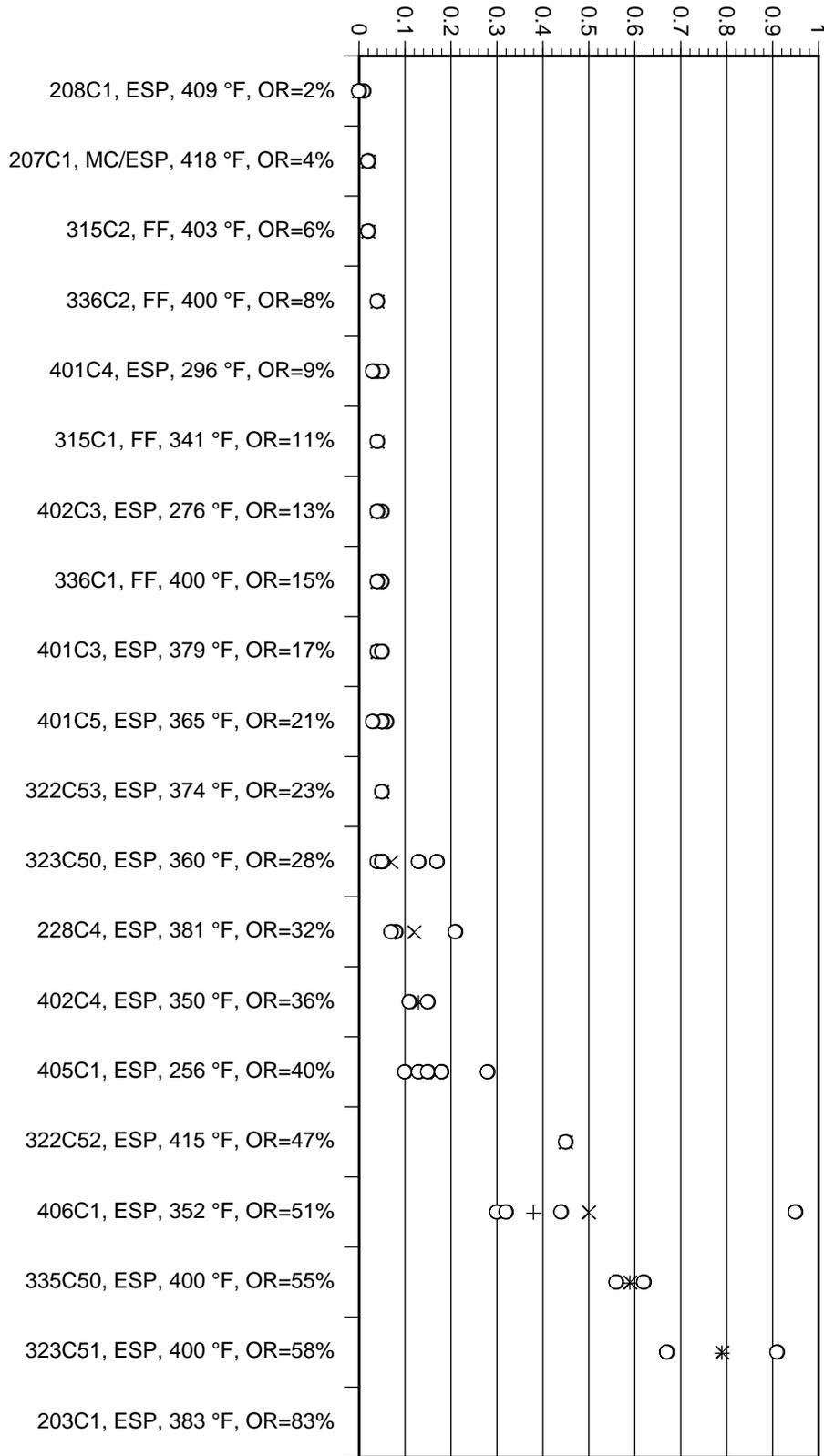


PCDD/PCDF TEQ -- Industrial Kilns -- Entire Universe



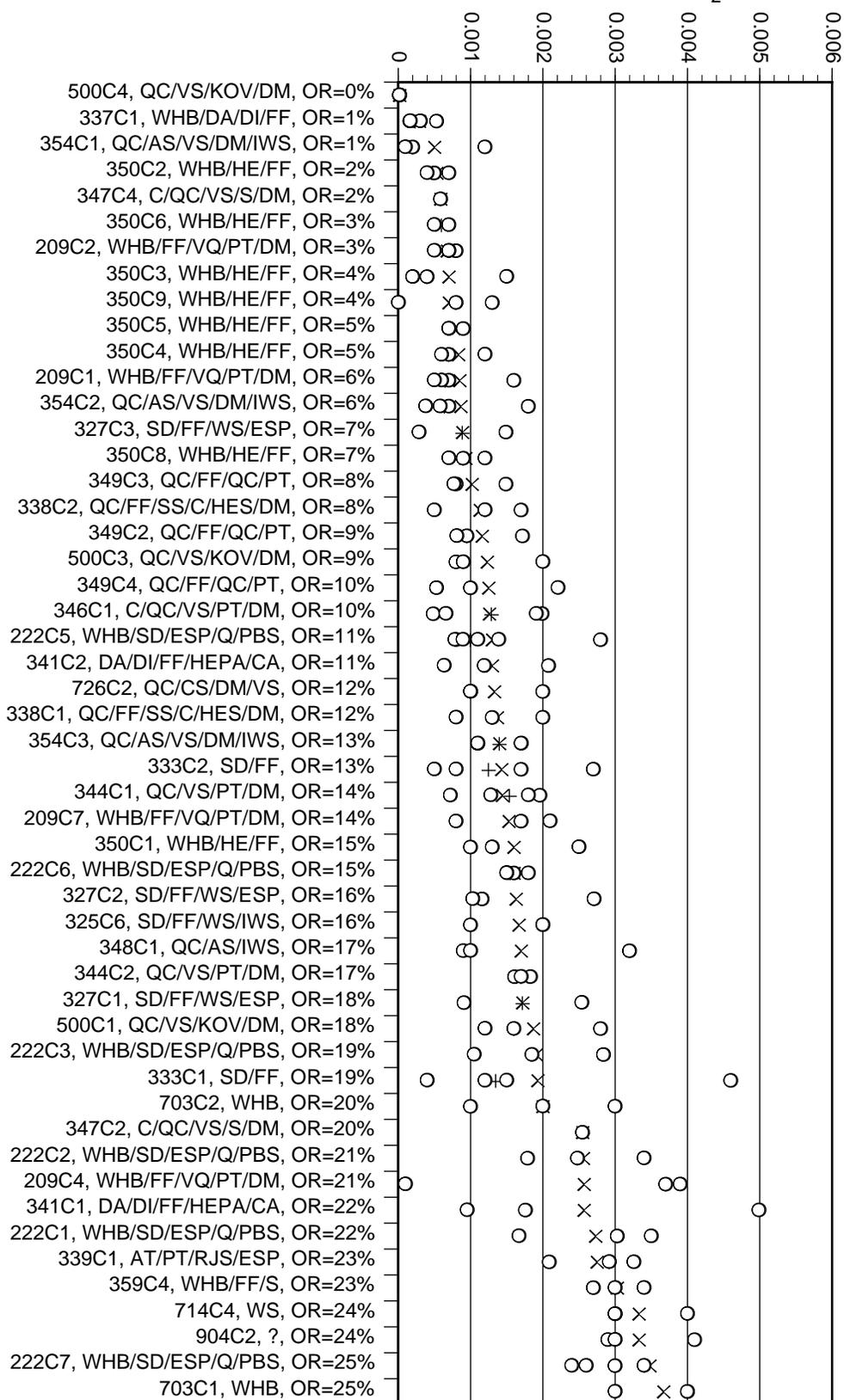
**PCDD/PCDF TEQ -- Industrial Kilns -- 6% MACT Expanded Universe**

PCDD/PCDF TEQ (ng/dscm @ 7% O<sub>2</sub>)

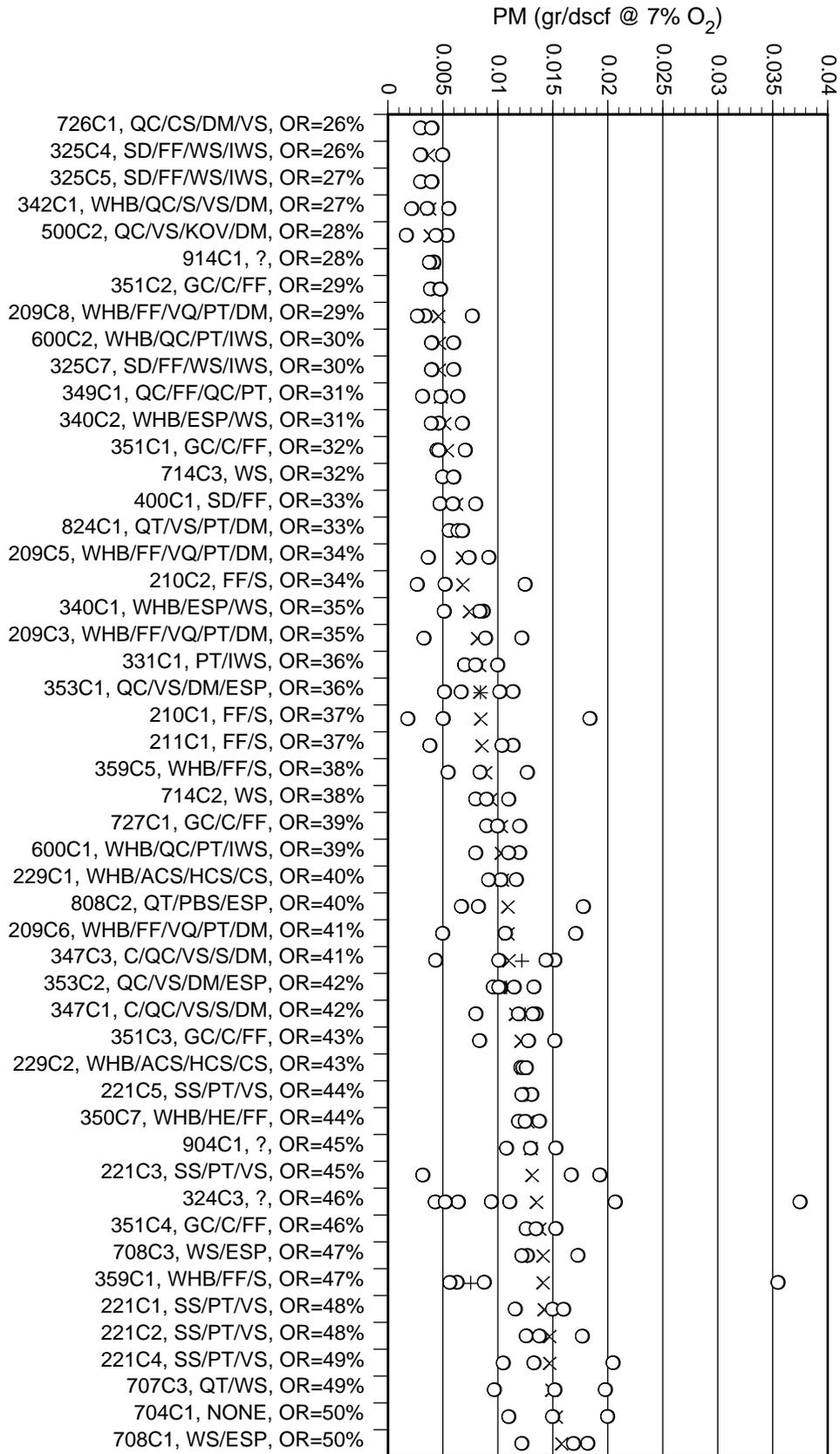


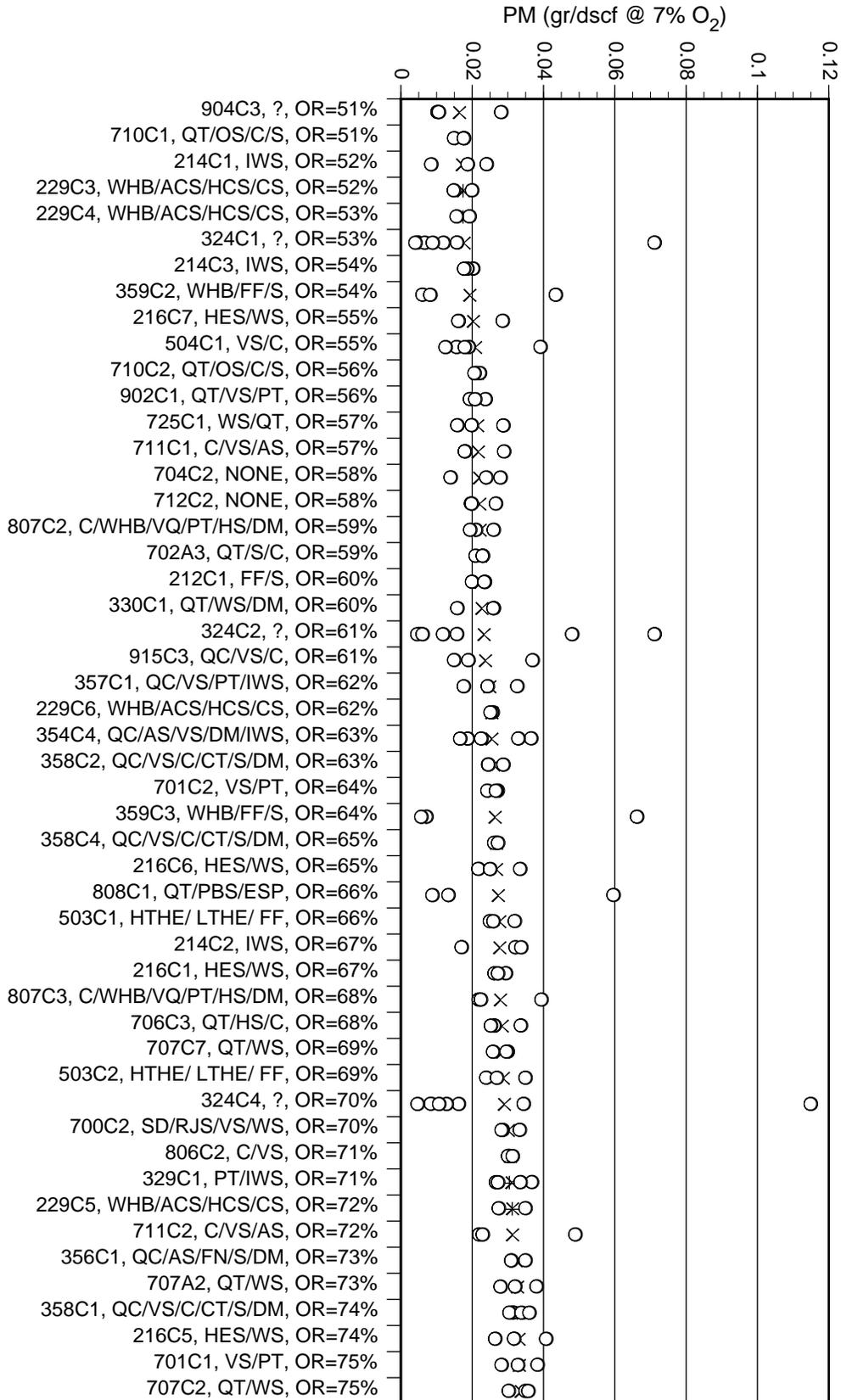
PCDD/PCDF TEQ -- Industrial Kilns -- 6% MACT Expanded Universe

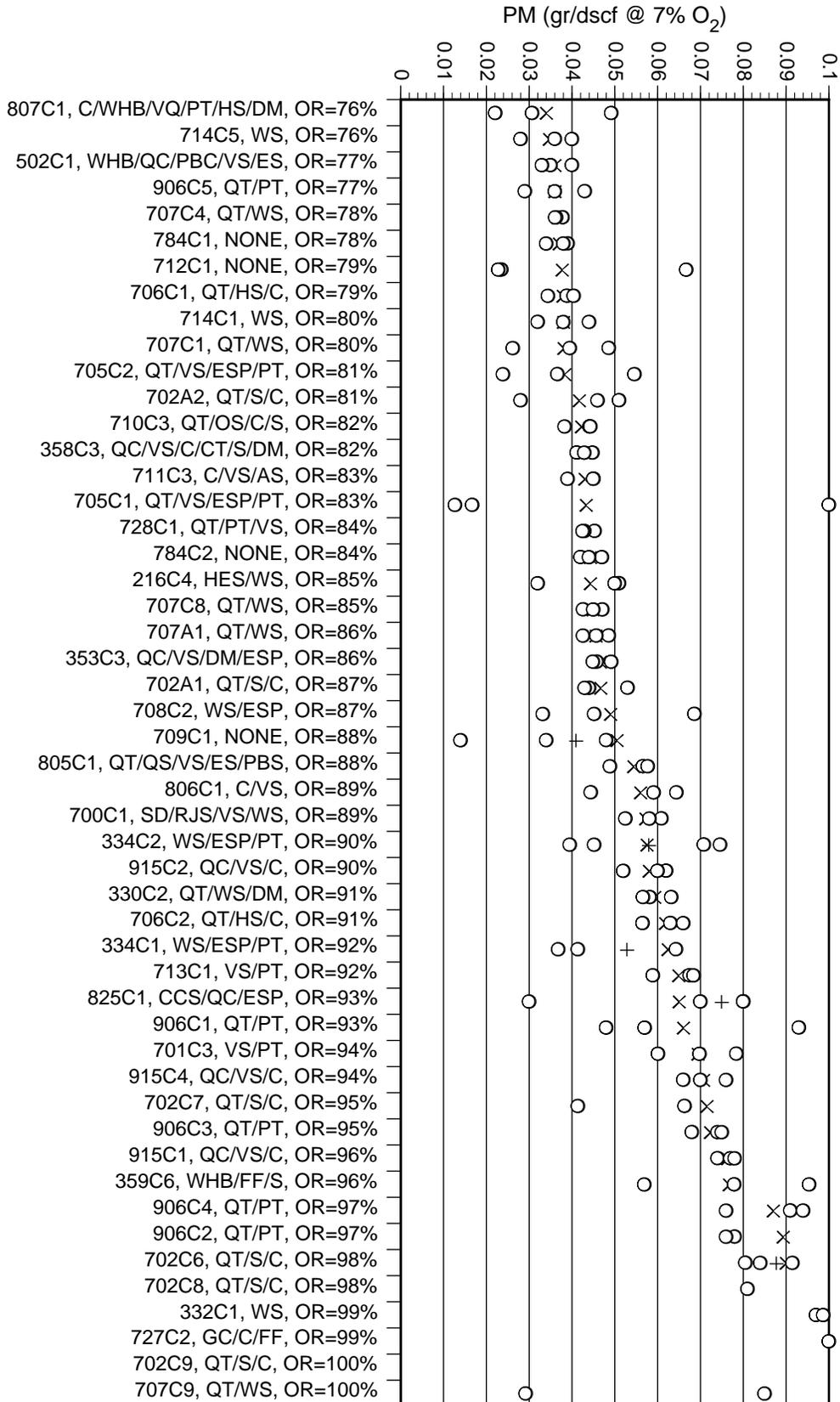
PM (gr/dscf @ 7% O<sub>2</sub>)

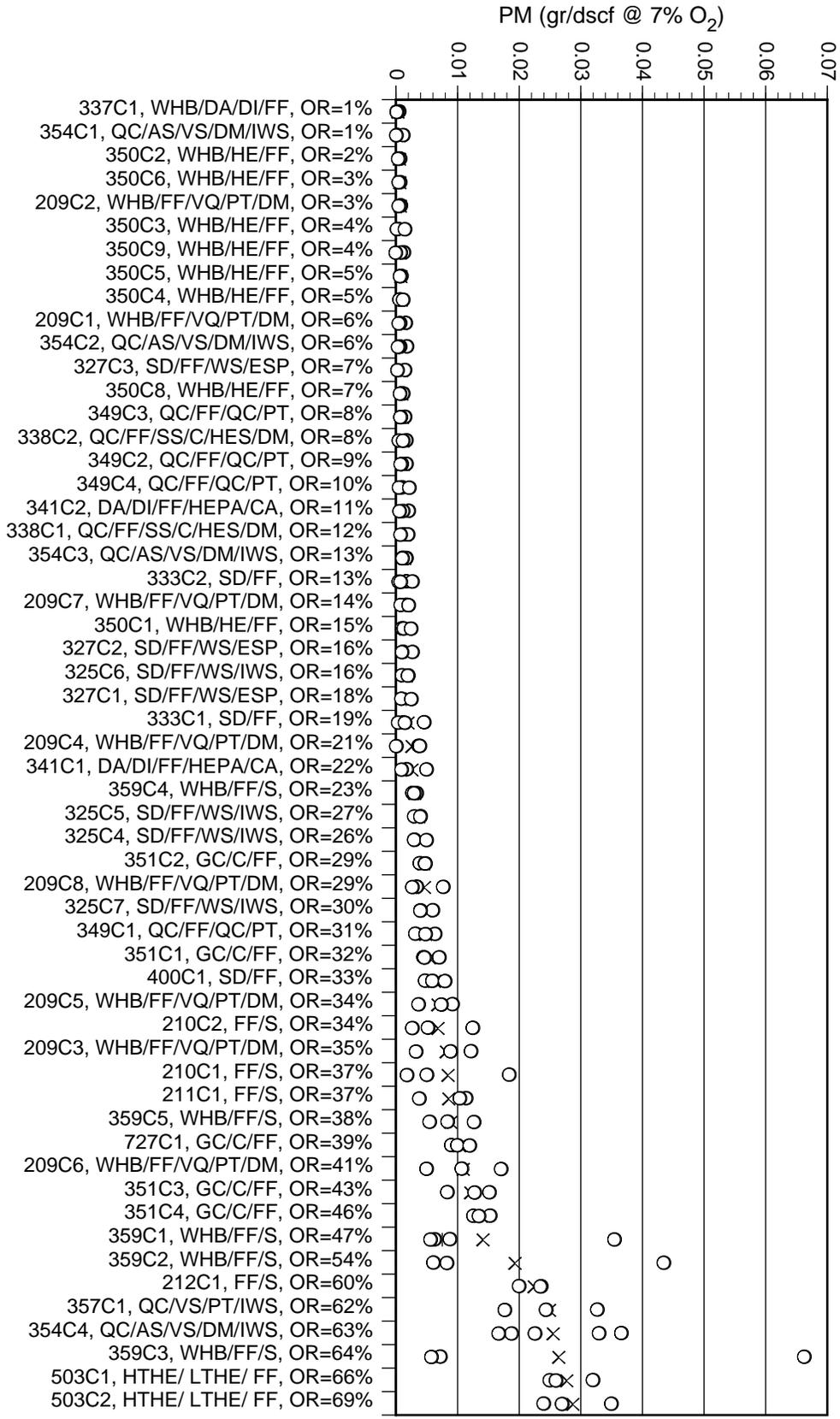


PM -- Incinerators -- Entire Universe -- 1 of 4

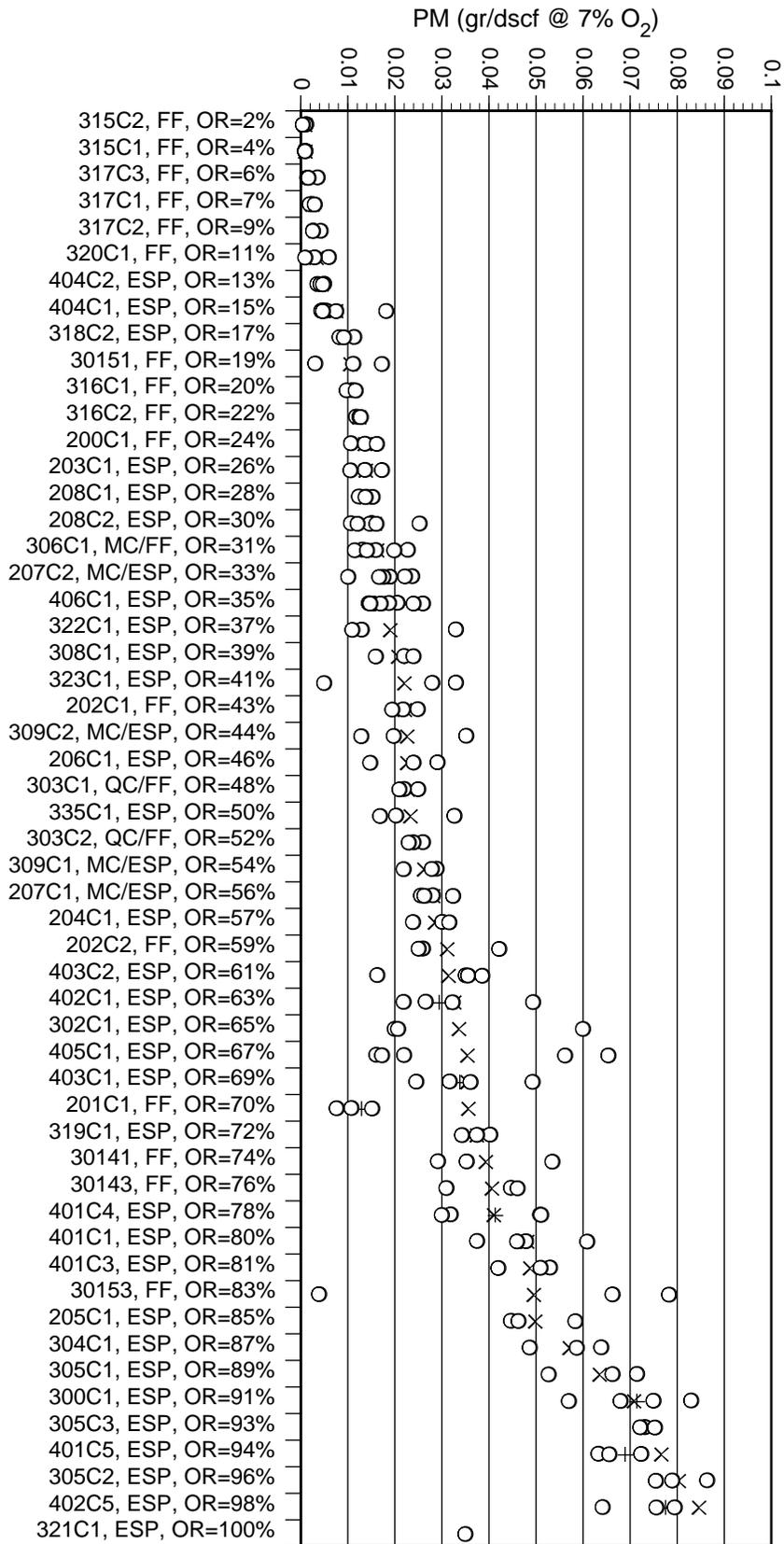






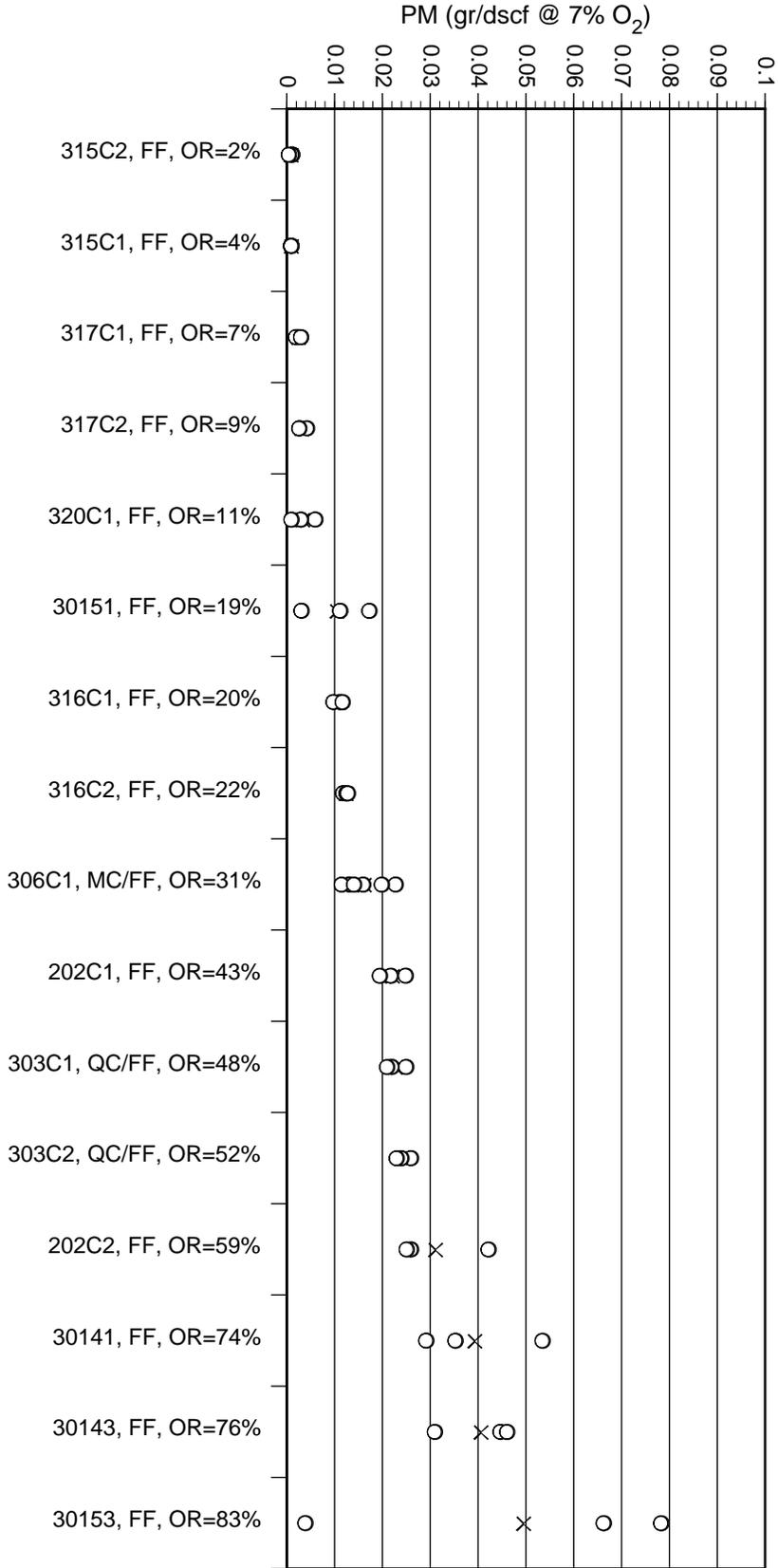


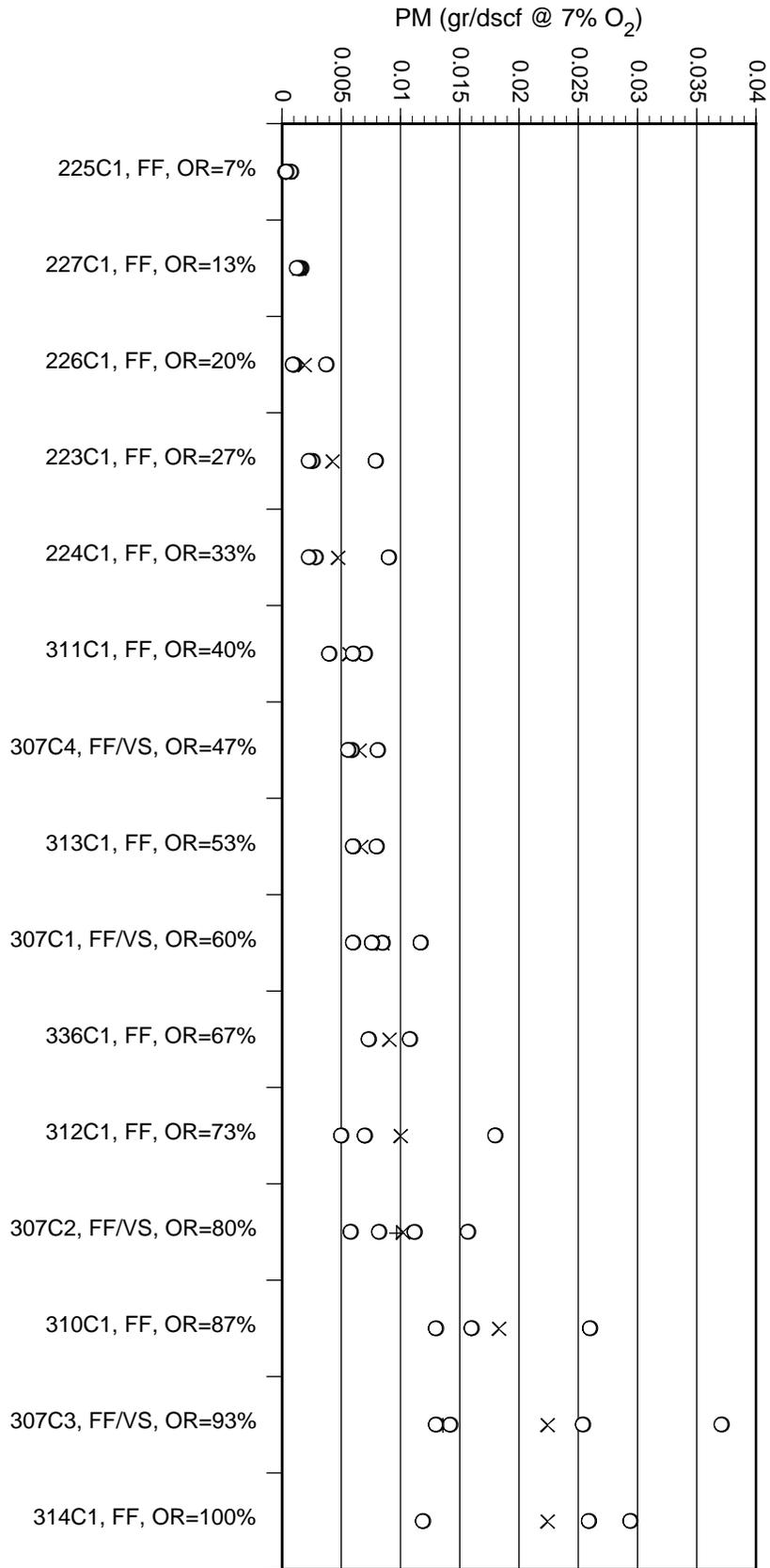
PM -- Incinerators -- 6% MACT Expanded Universe



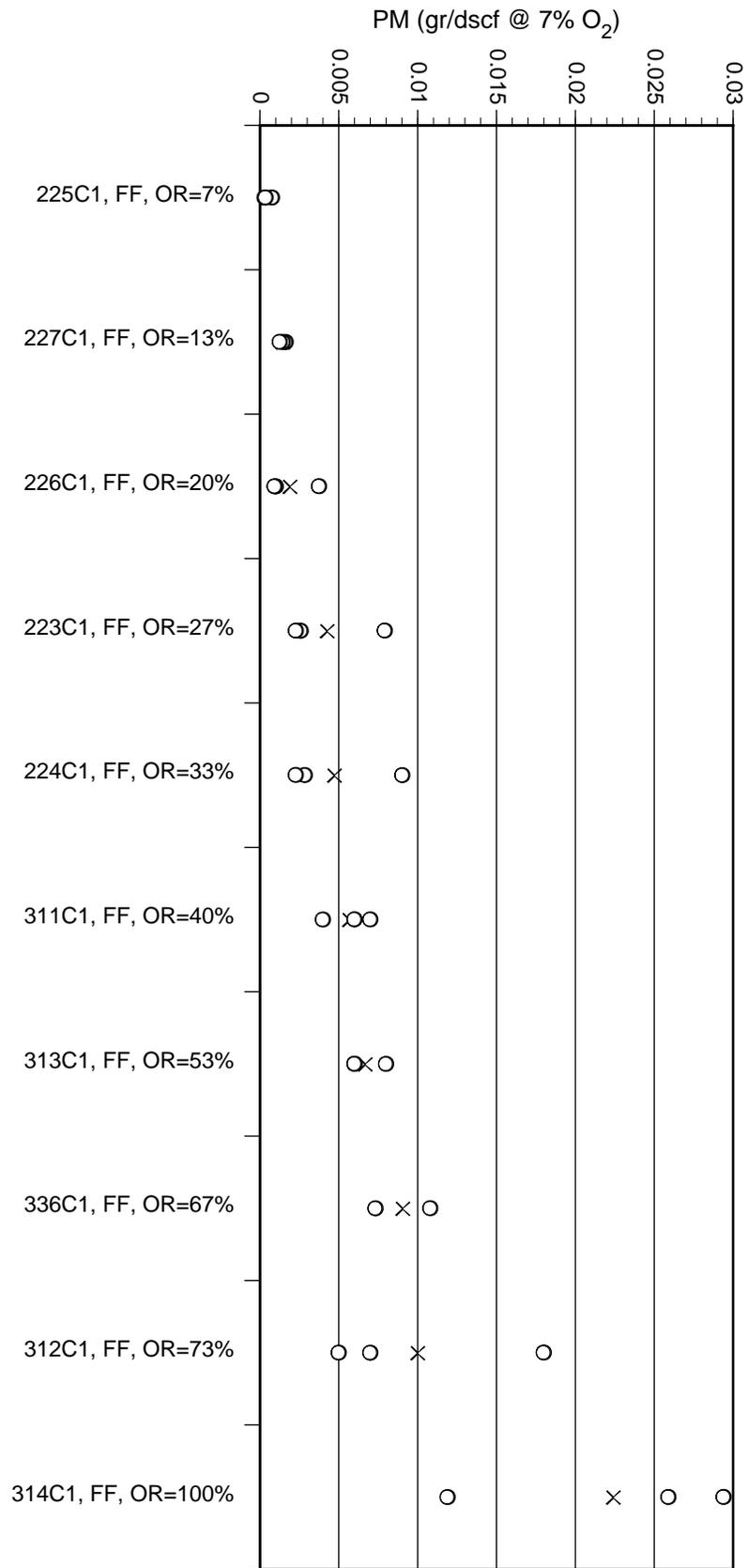
**PM -- Cement Kilns -- Entire Universe**

**PM -- Cement Kilns -- 6% MACT Expanded Universe**



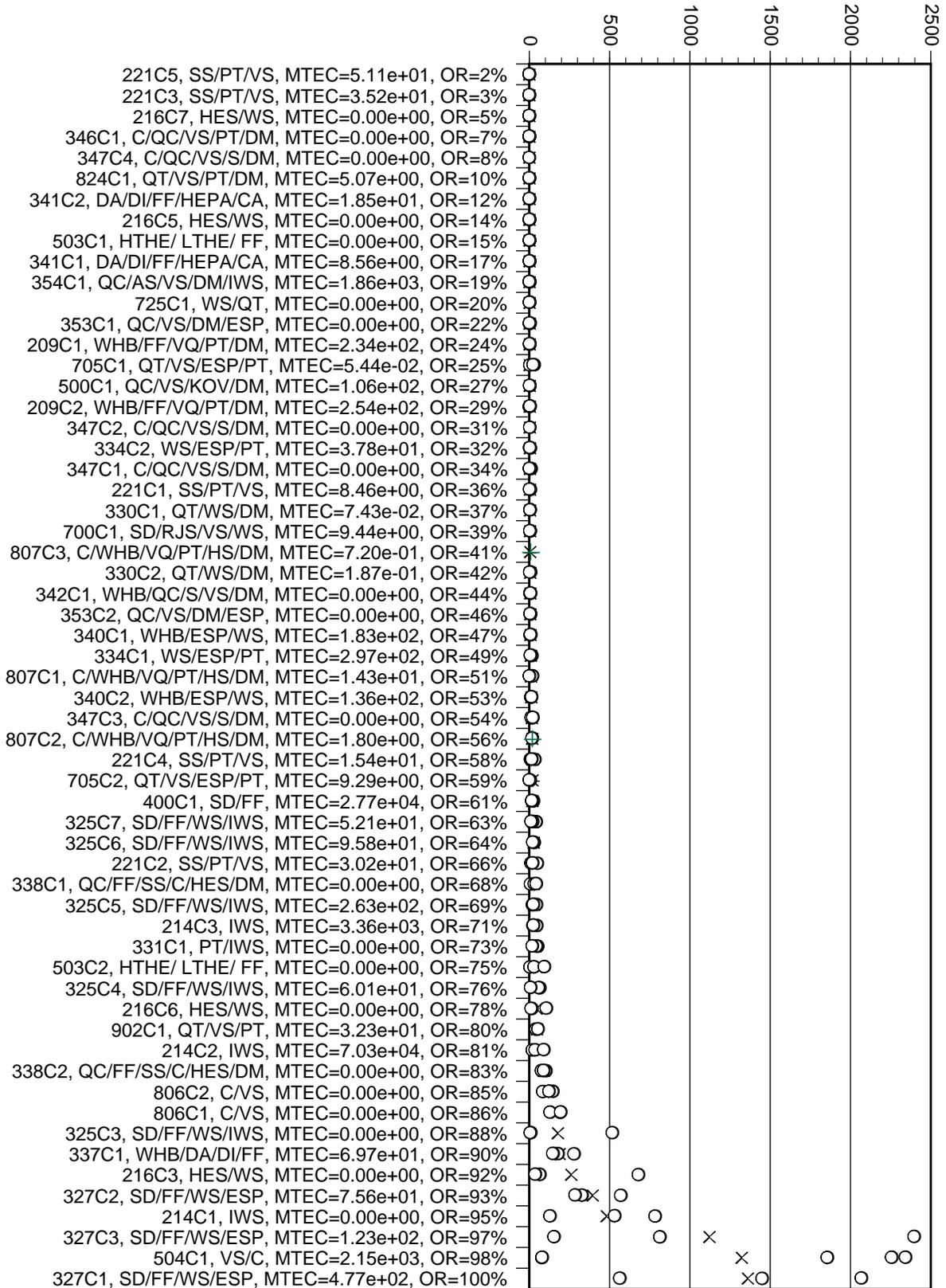


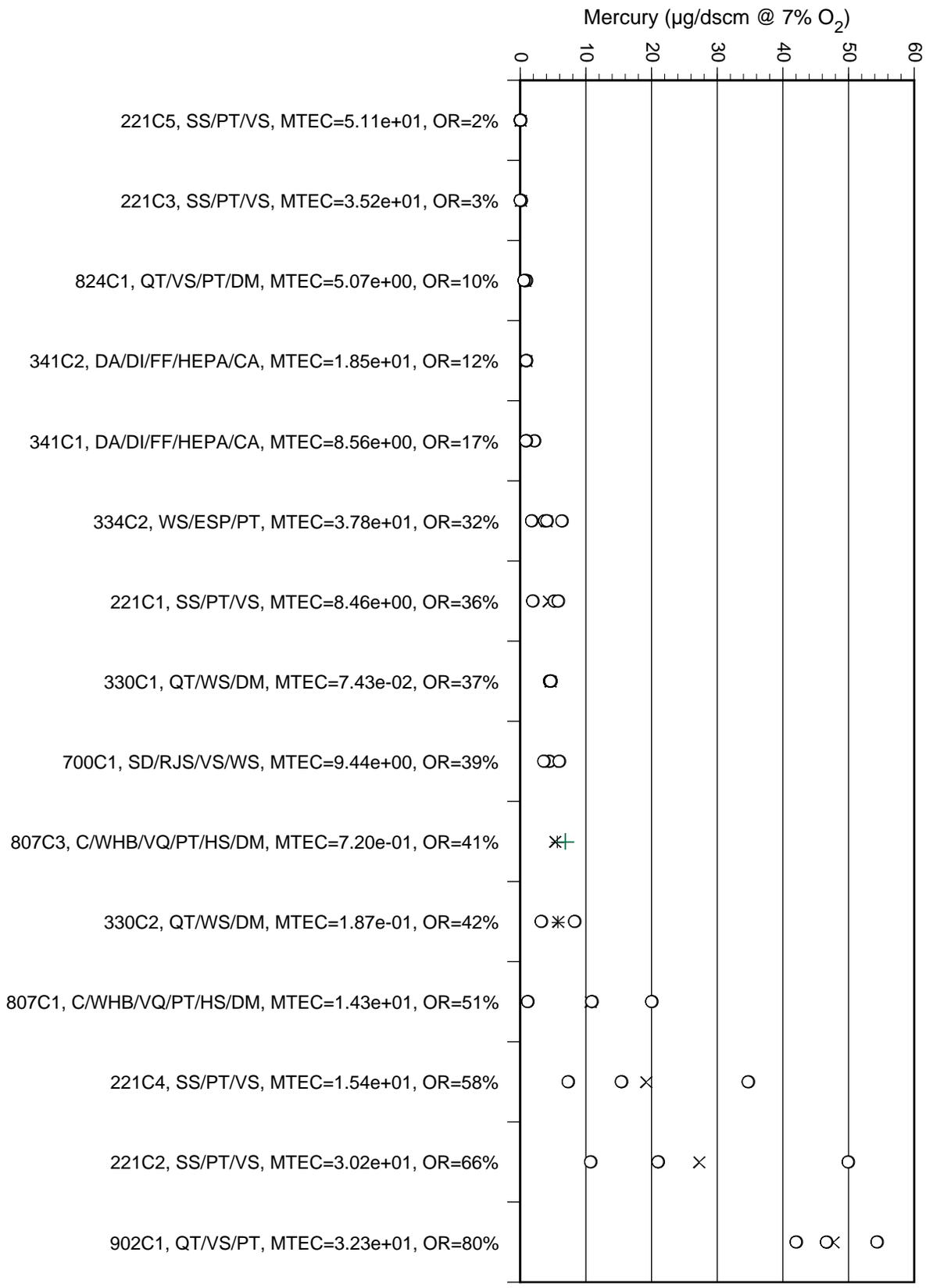
PM -- LWAKs -- Entire Universe



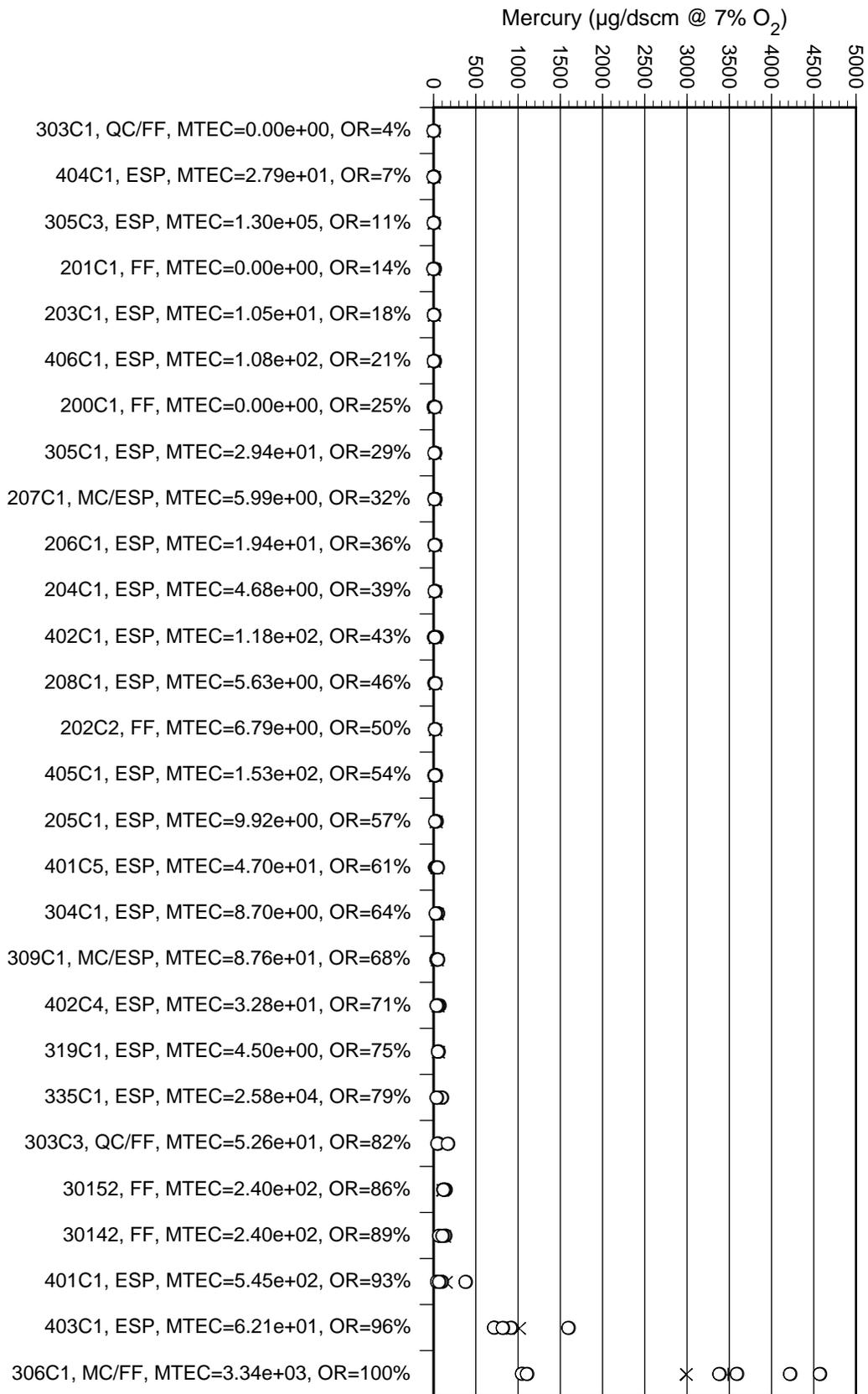
**PM -- LWAKS -- 6% MACT Expanded Universe**

Mercury ( $\mu\text{g}/\text{dscm}$  @ 7%  $\text{O}_2$ )

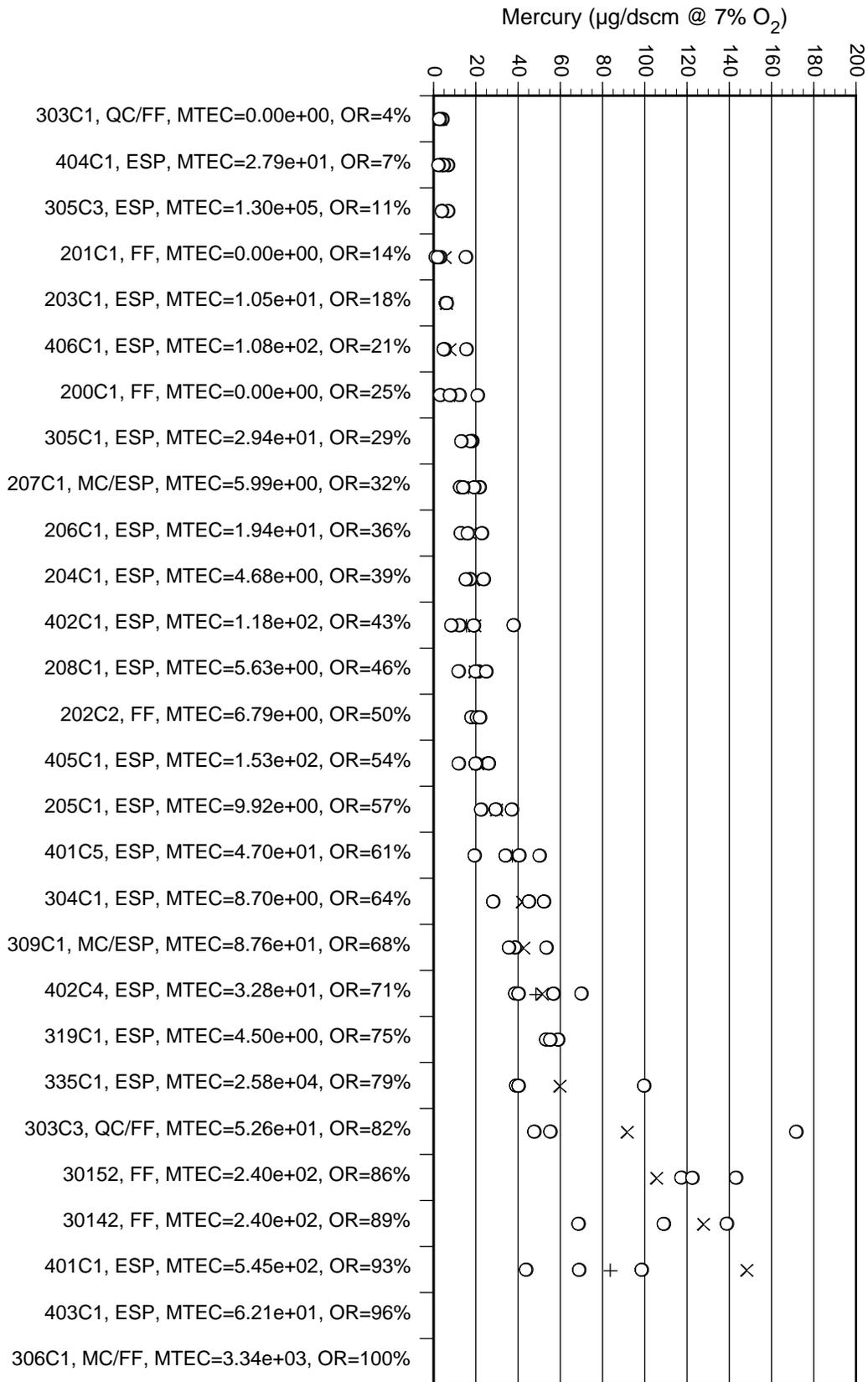




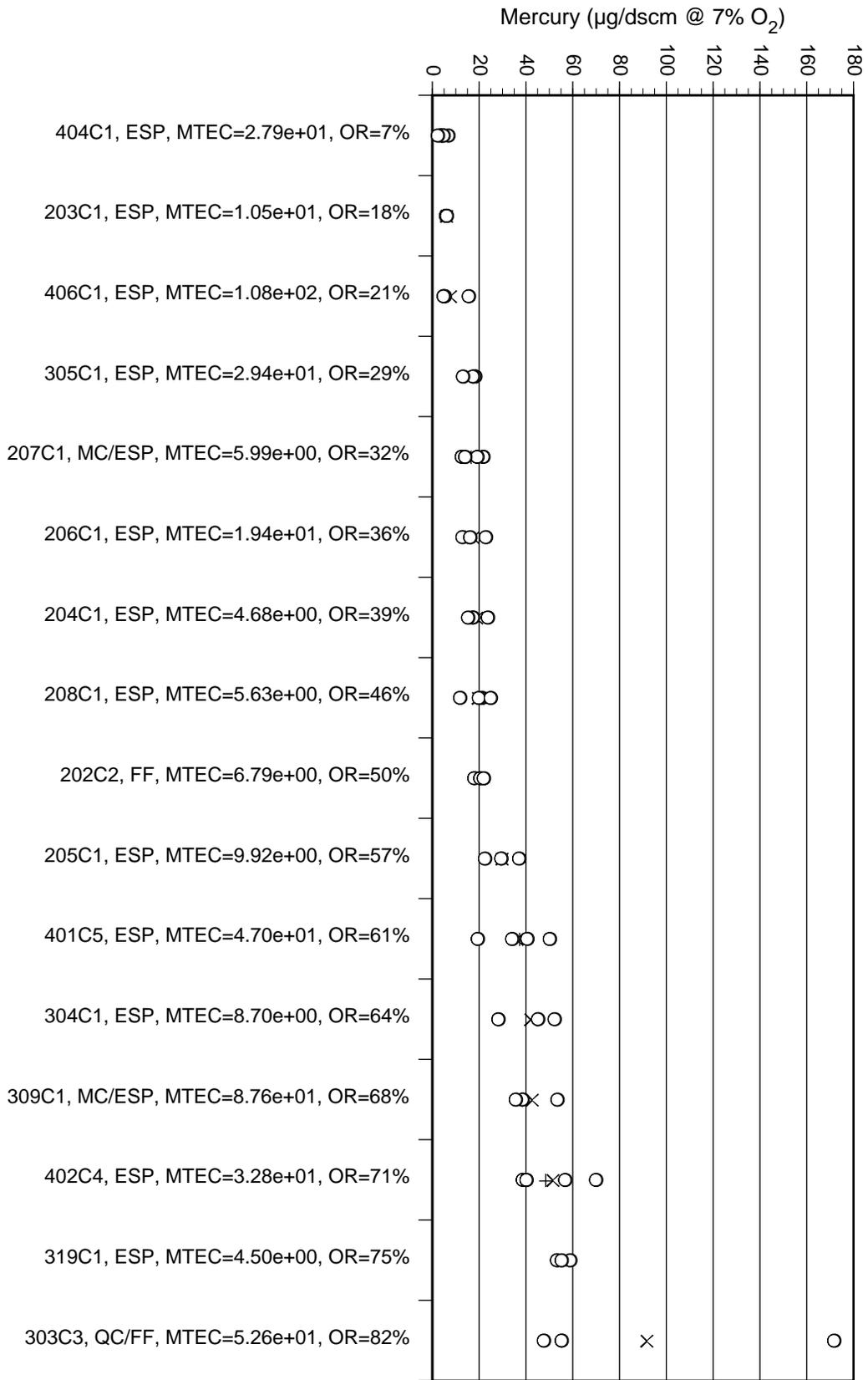
Mercury -- Incinerators -- 6% MACT Expanded Universe



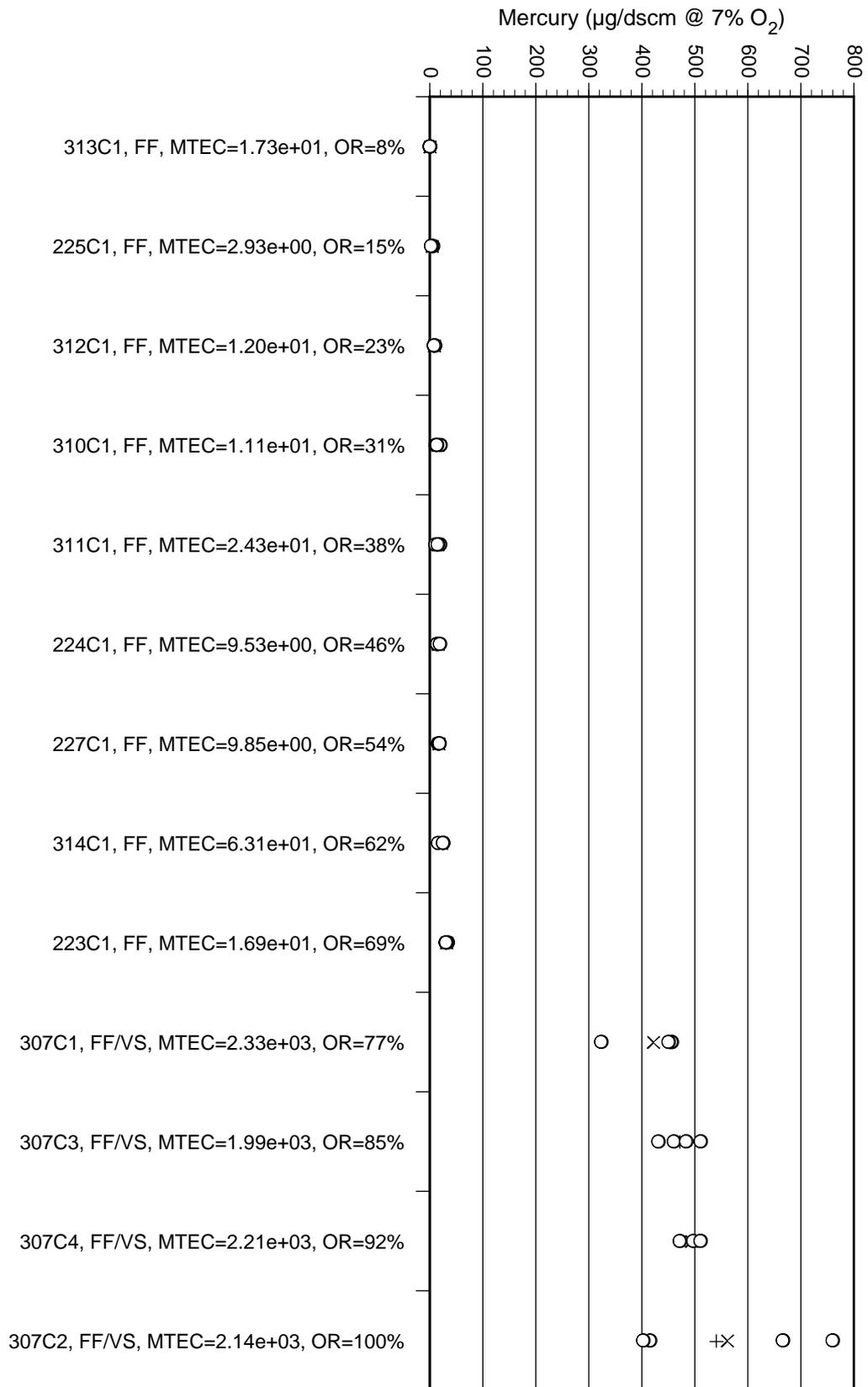
Mercury -- Cement Kilns -- Entire Universe



Mercury -- Cement Kilns -- Entire Universe

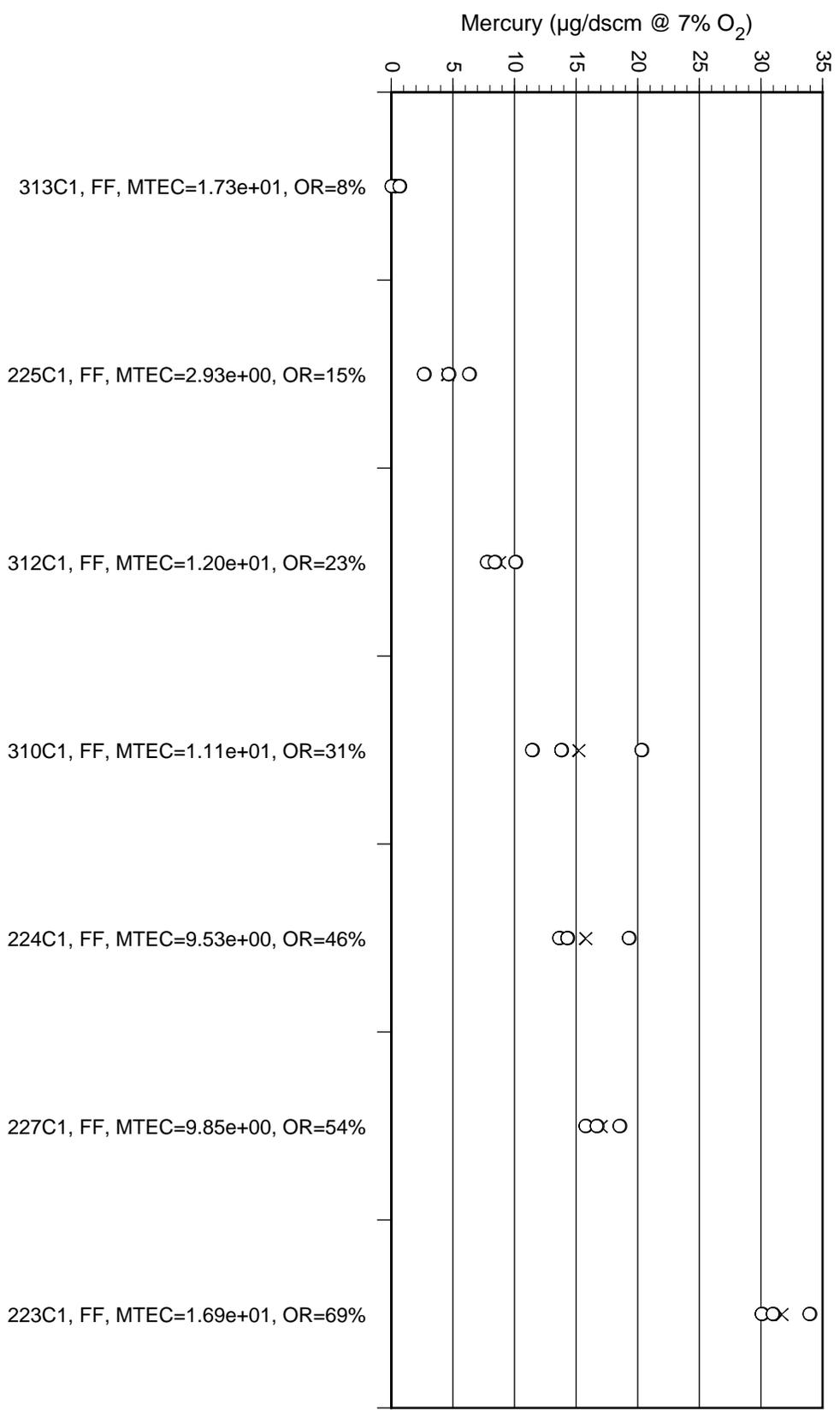


Mercury -- Cement Kilns -- 6% MACT Expanded Universe

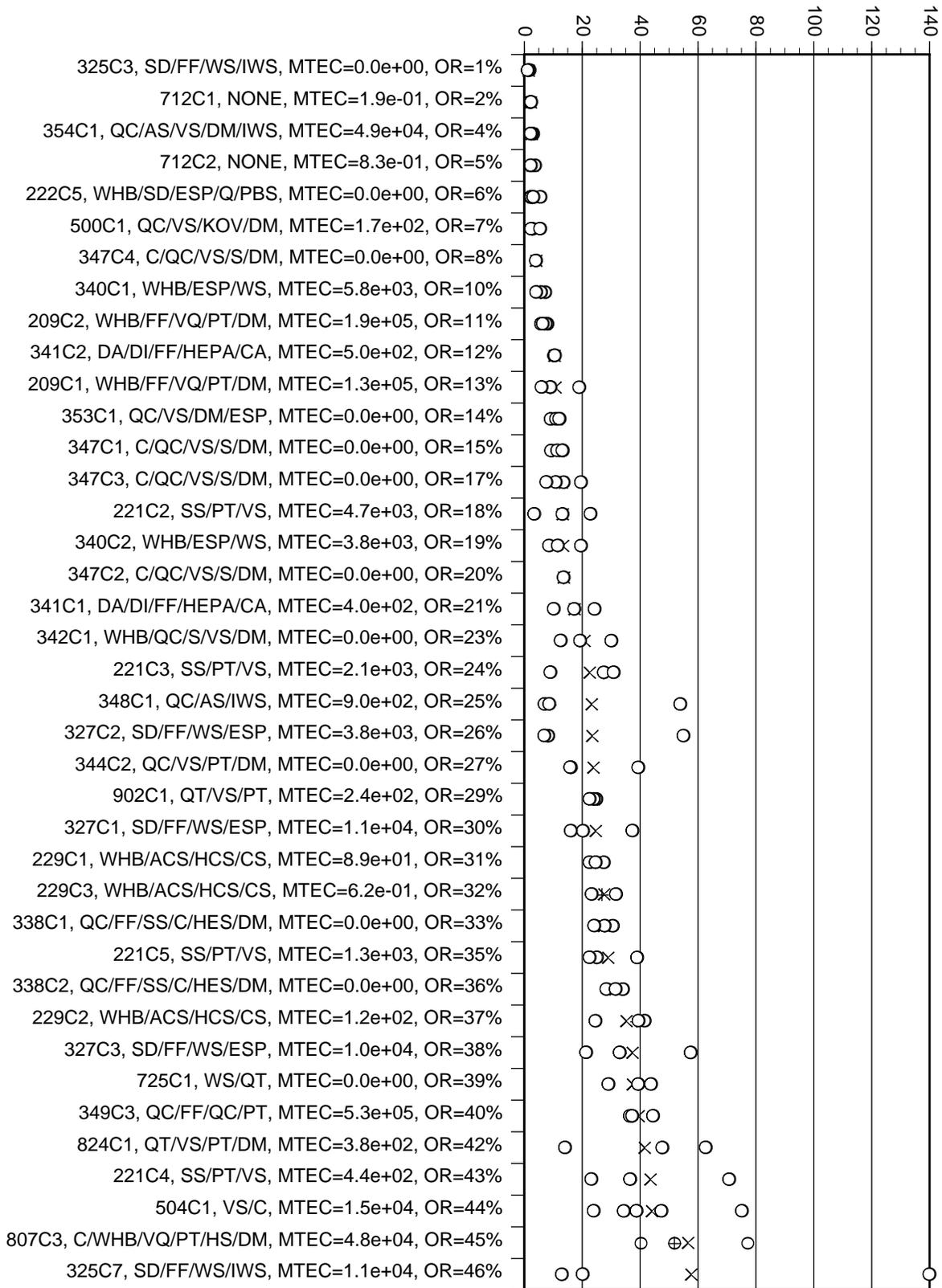


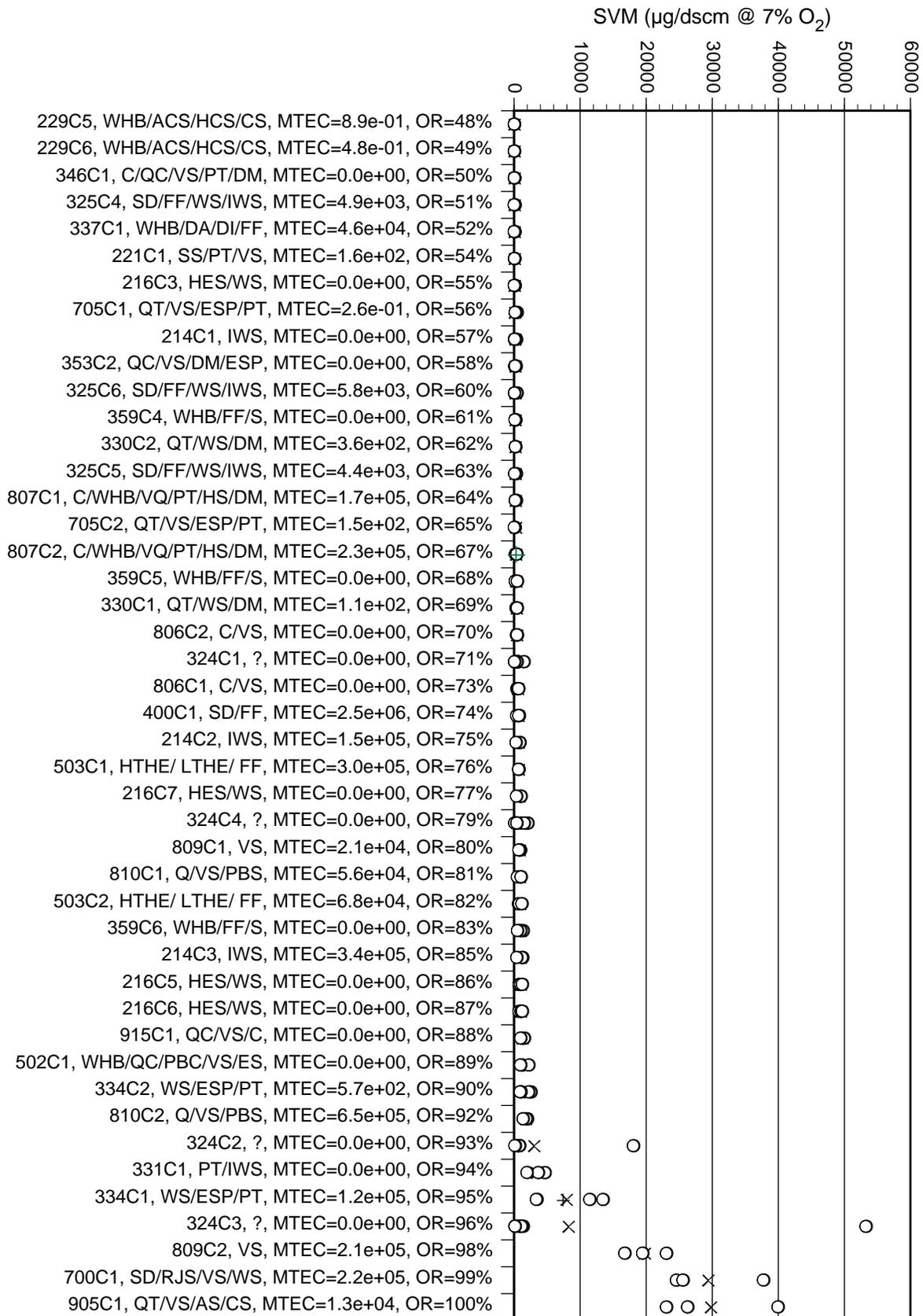
Mercury -- LWAKs -- Entire Universe

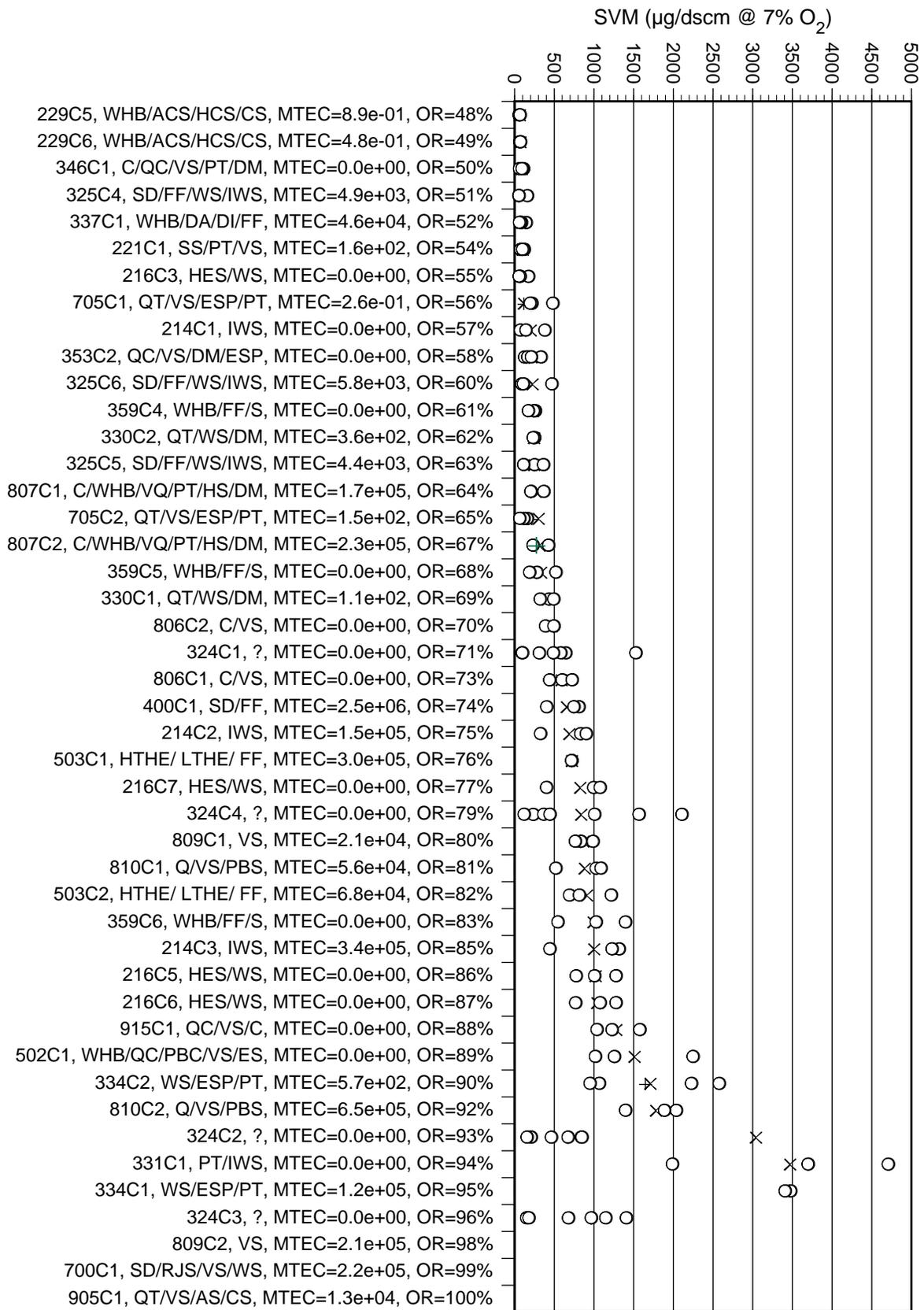
Mercury -- LWAKS -- 6% MACT Expanded Universe

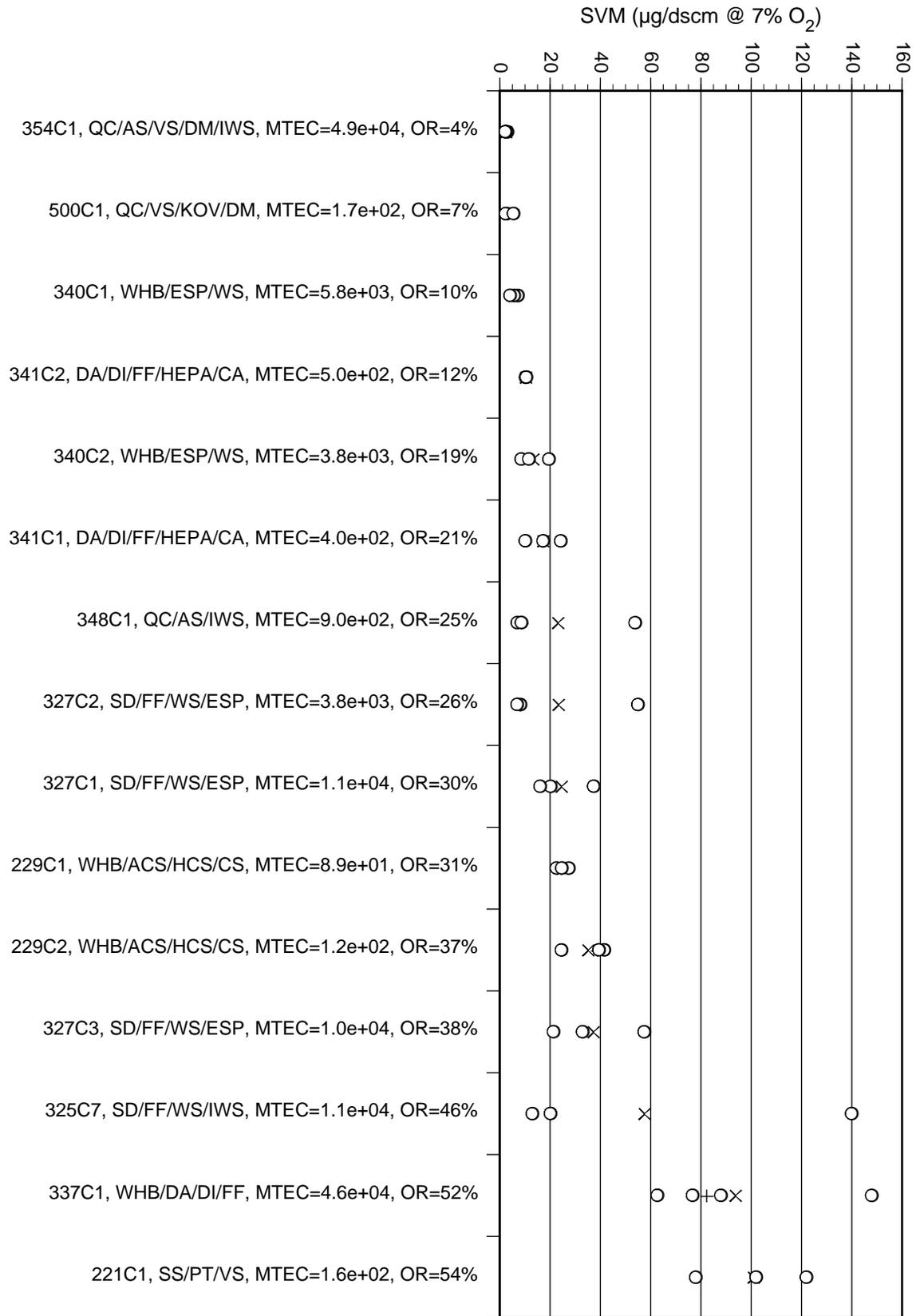


SVM ( $\mu\text{g}/\text{dscm}$  @ 7%  $\text{O}_2$ )



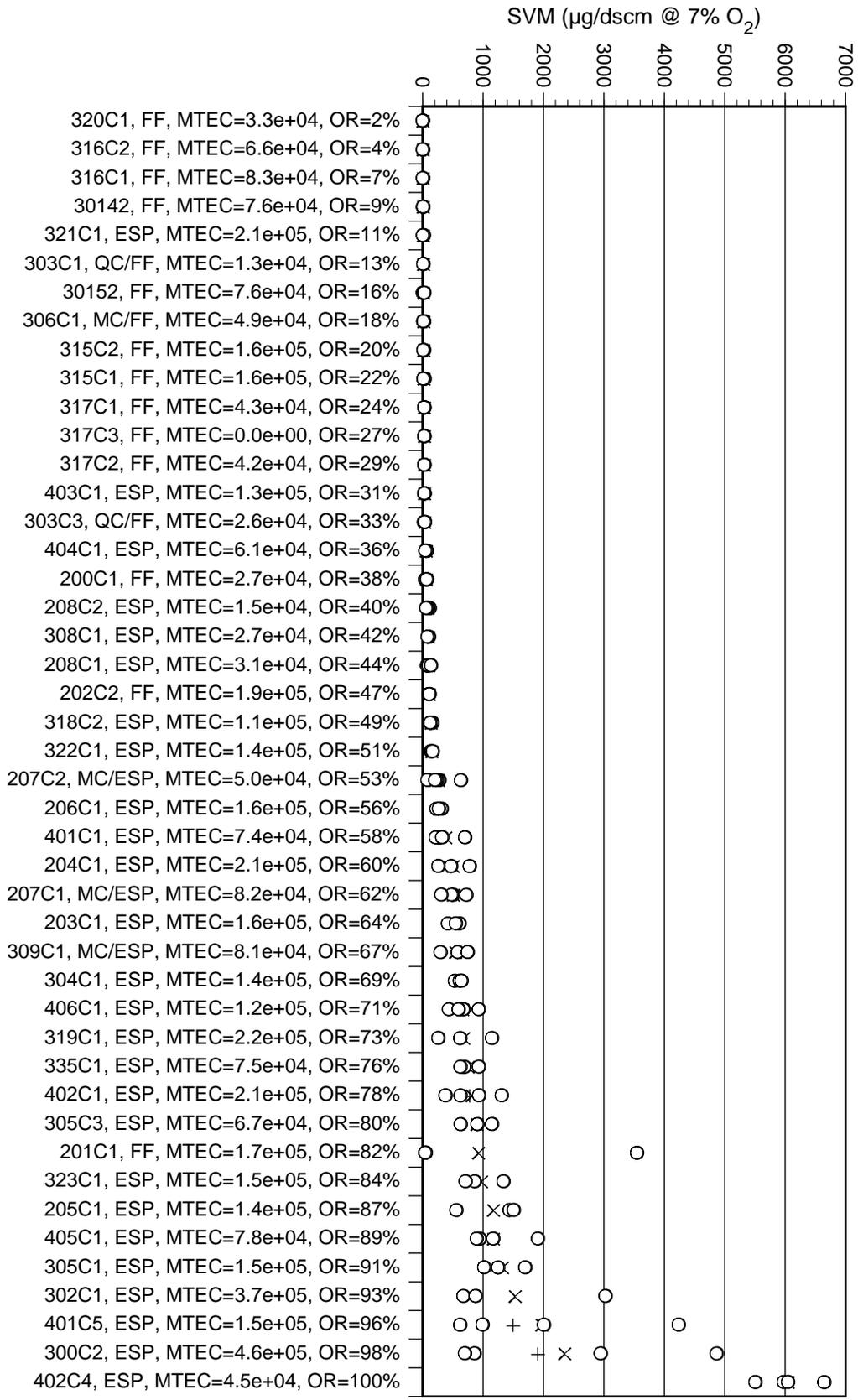




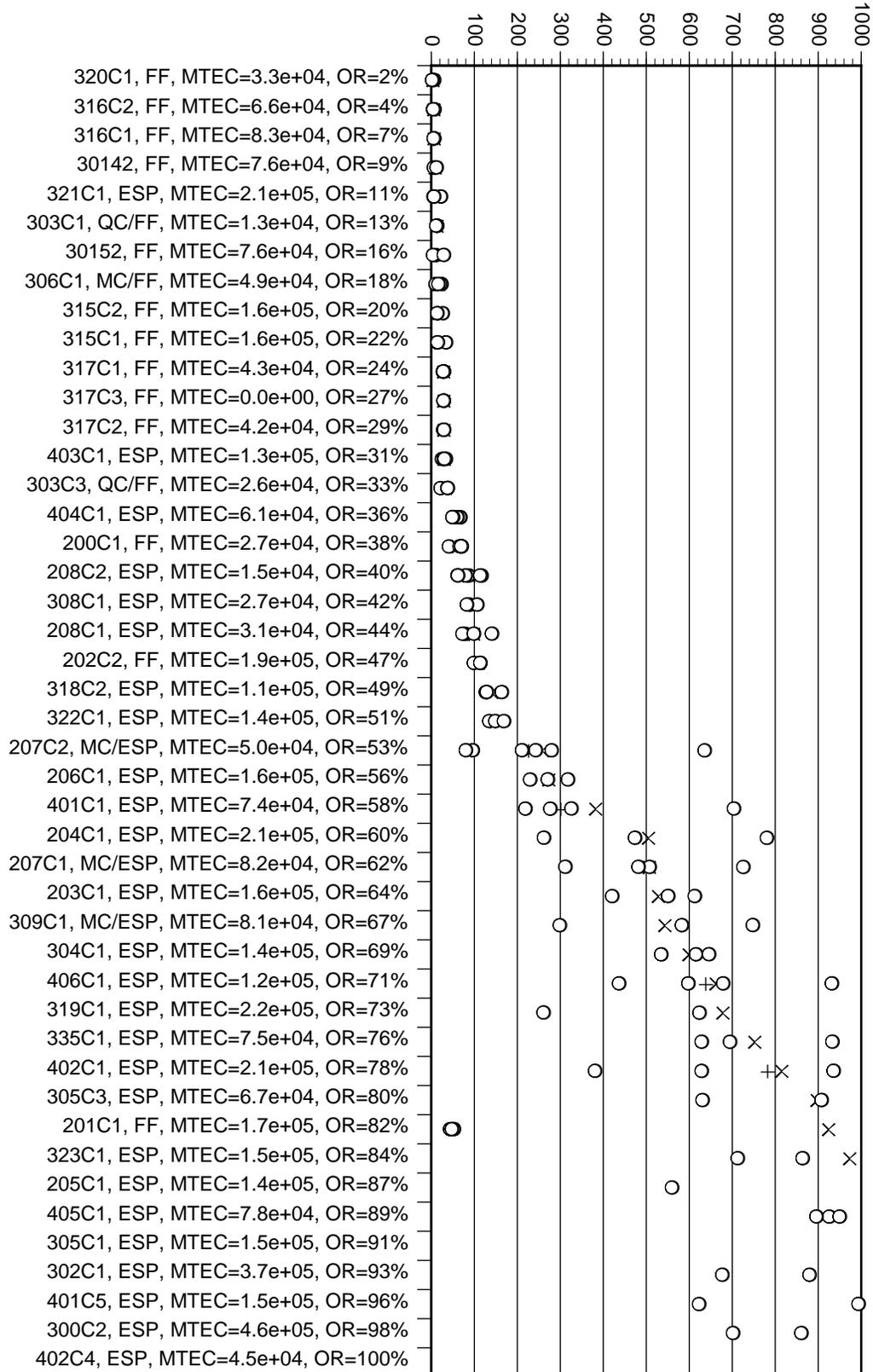


SVM -- Incinerators -- 6% MACT Expanded Universe

**SVM -- Cement Kilns -- Entire Universe**

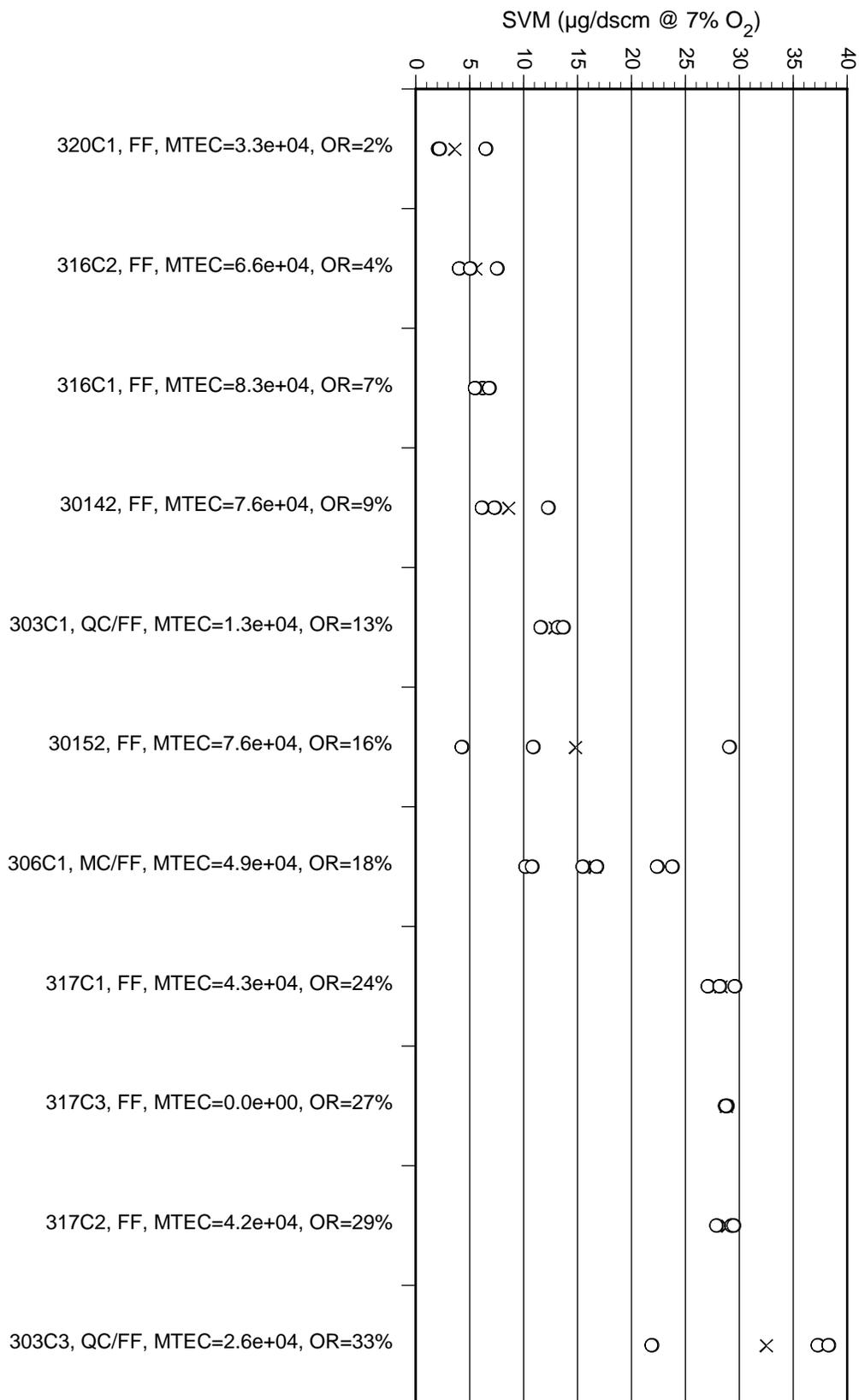


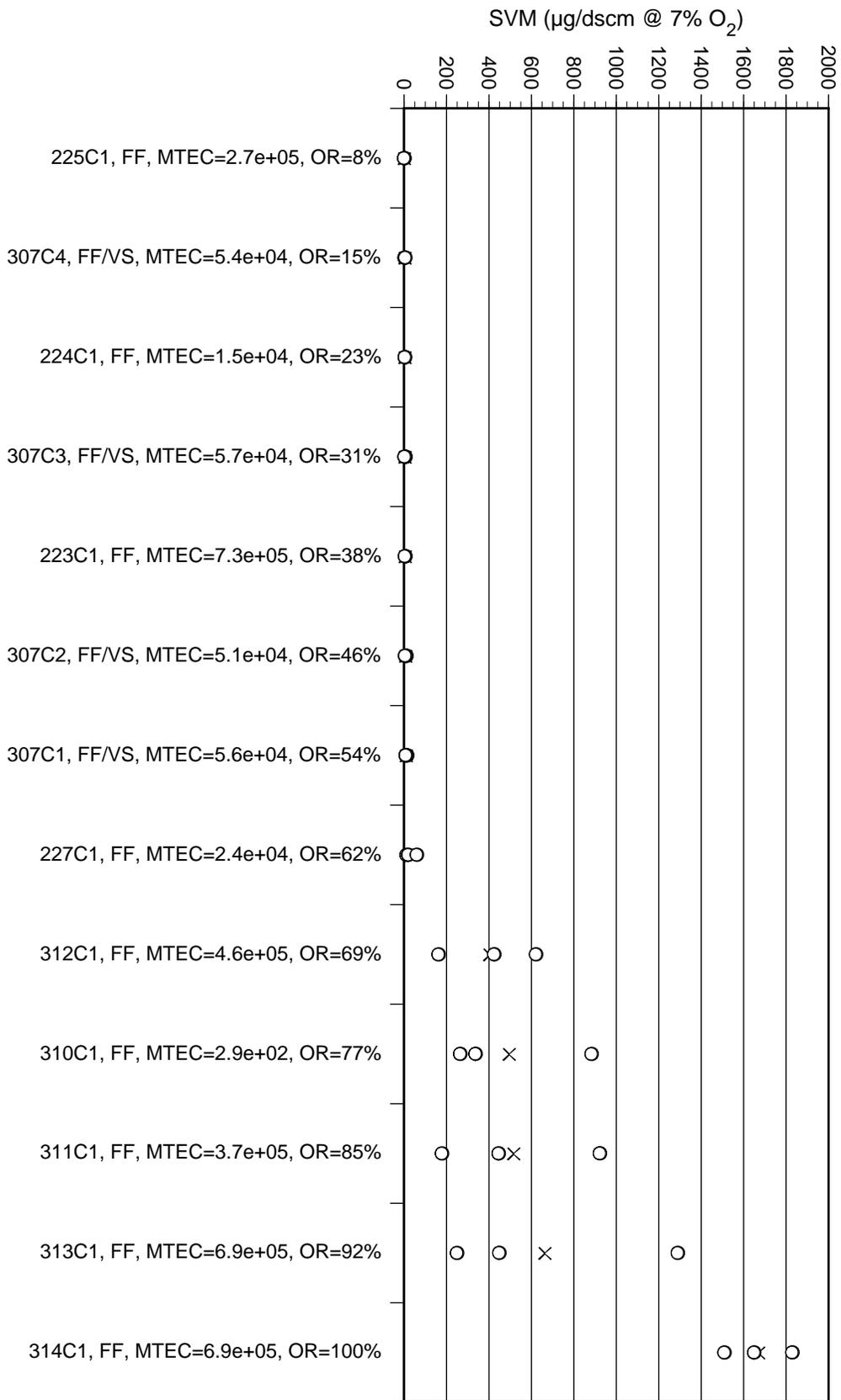
SVM ( $\mu\text{g/dscm}$  @ 7%  $\text{O}_2$ )



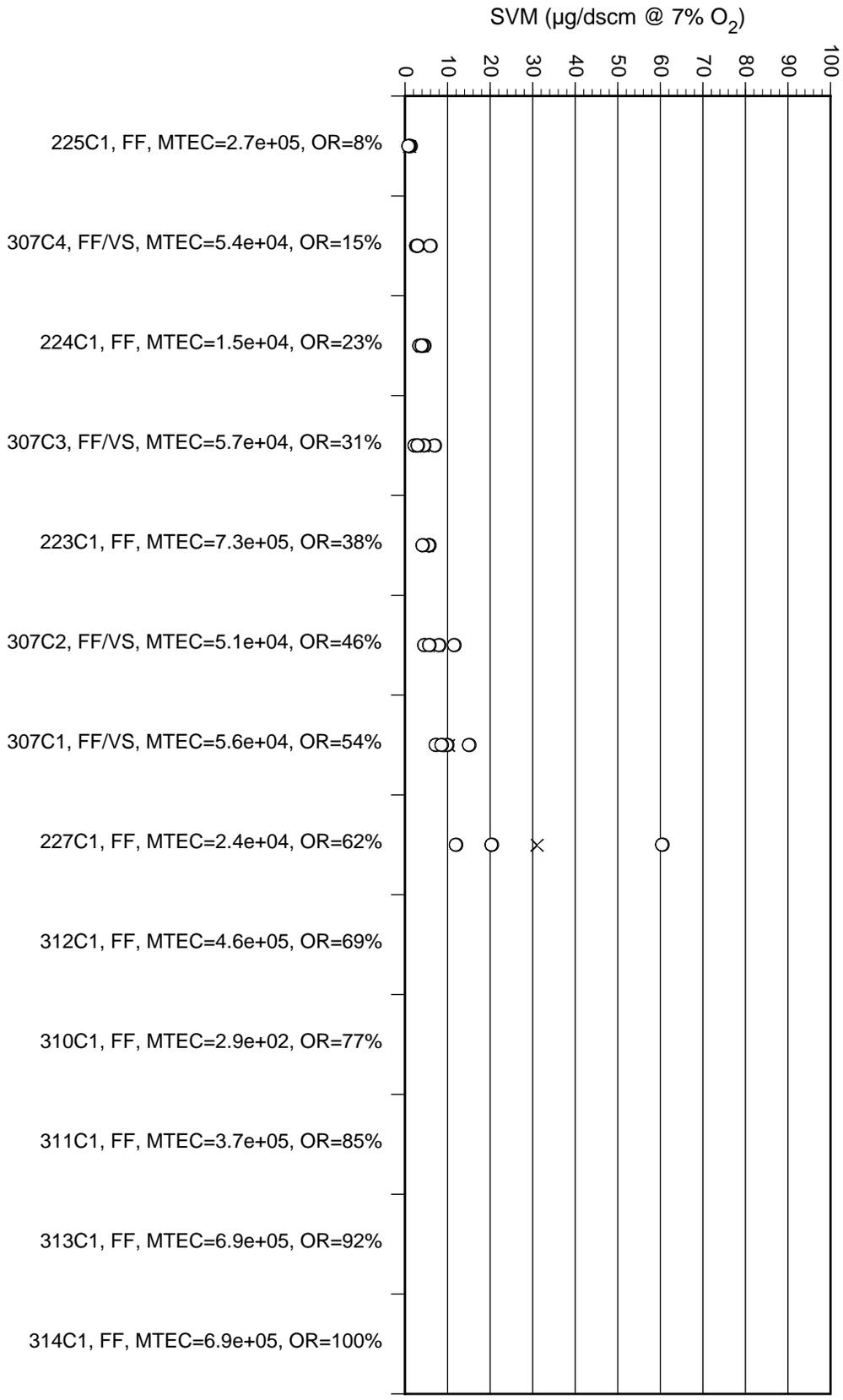
SVM -- Cement Kilns -- Entire Universe

**SVM -- Cement Kilns -- 6% MACT Expanded Universe**

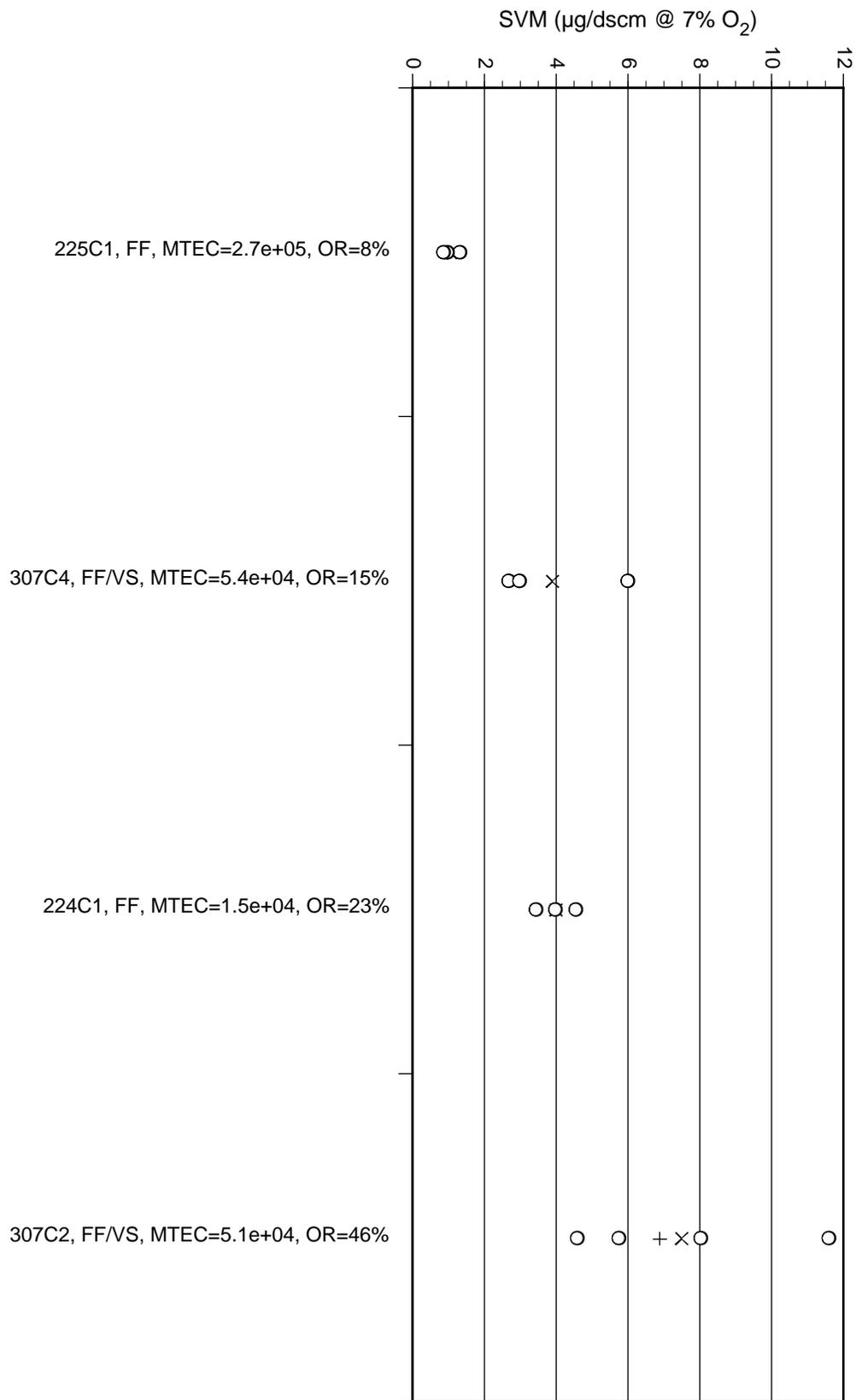




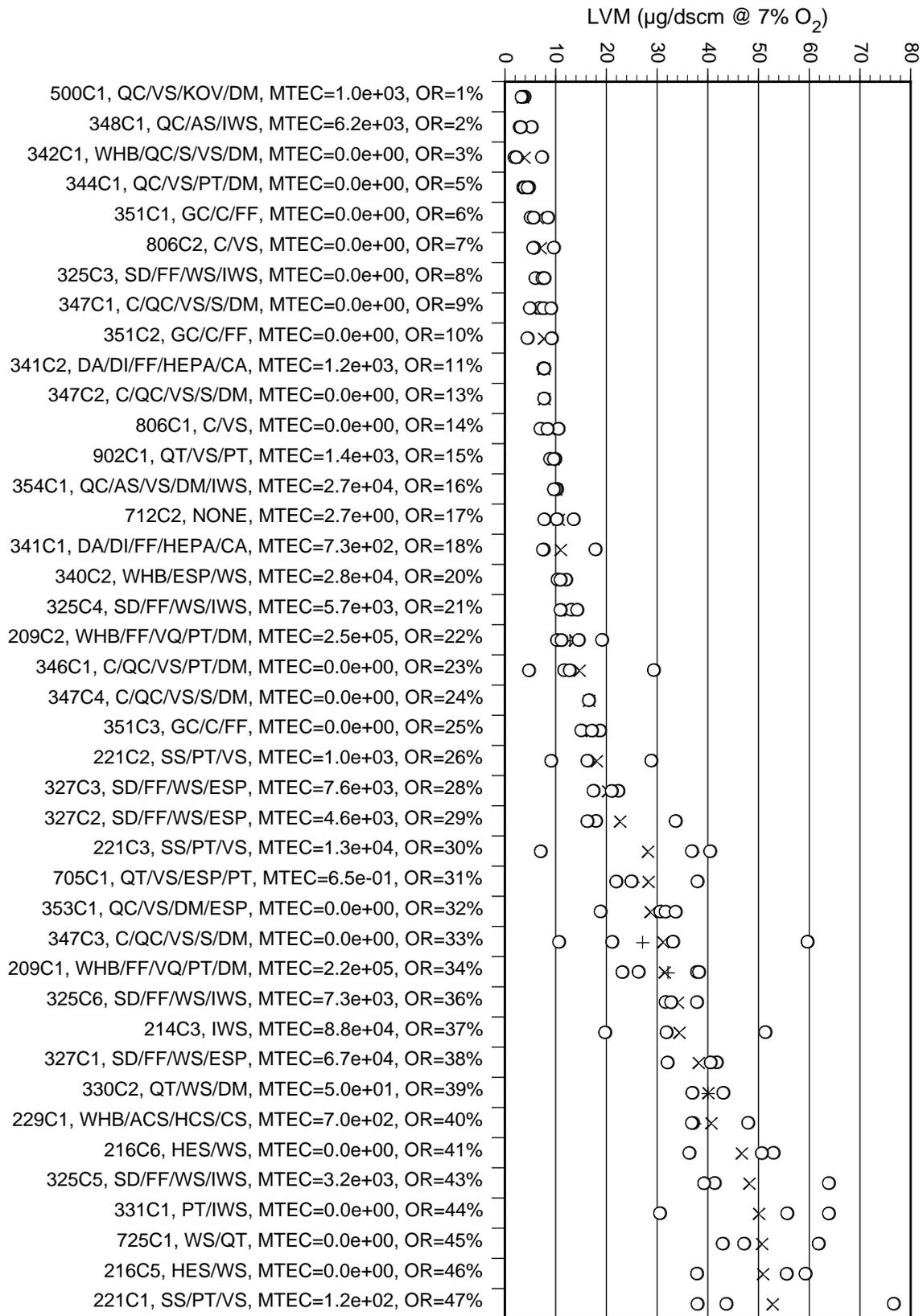
**SVM -- LWAKs -- Entire Universe**



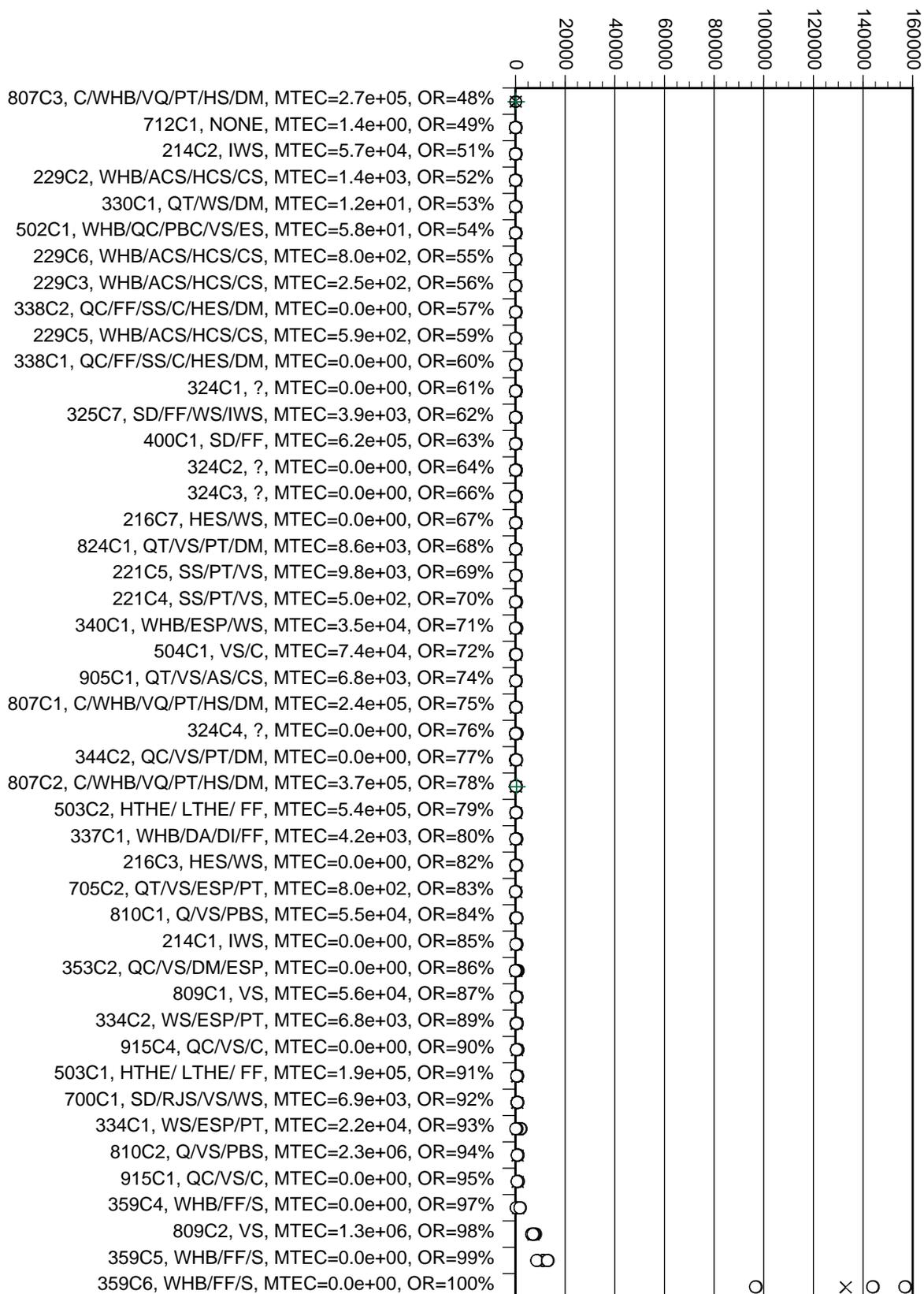
SVM -- LWAKs -- Entire Universe



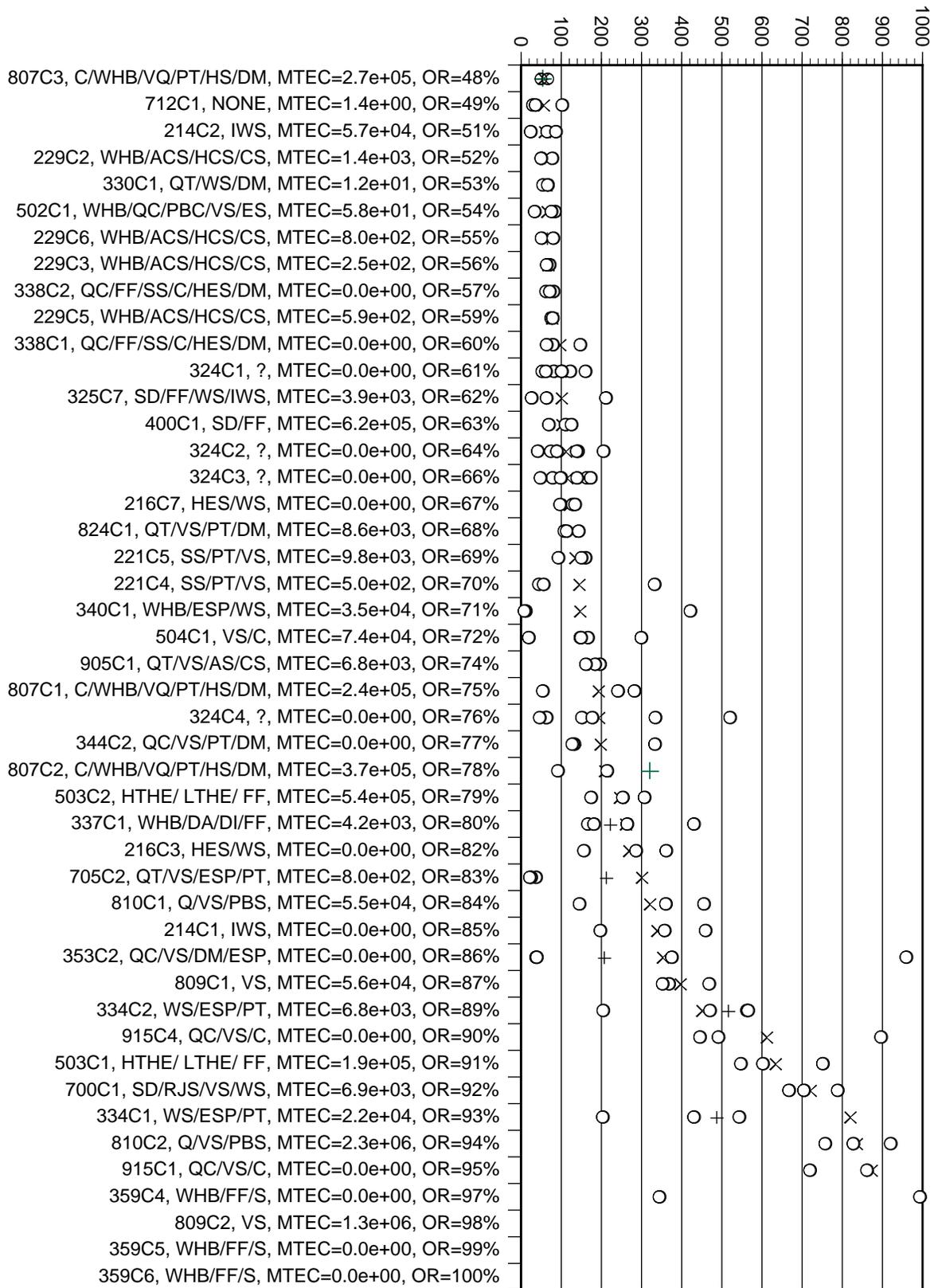
**SVM -- LWAKs -- 6% MACT Expanded Universe**

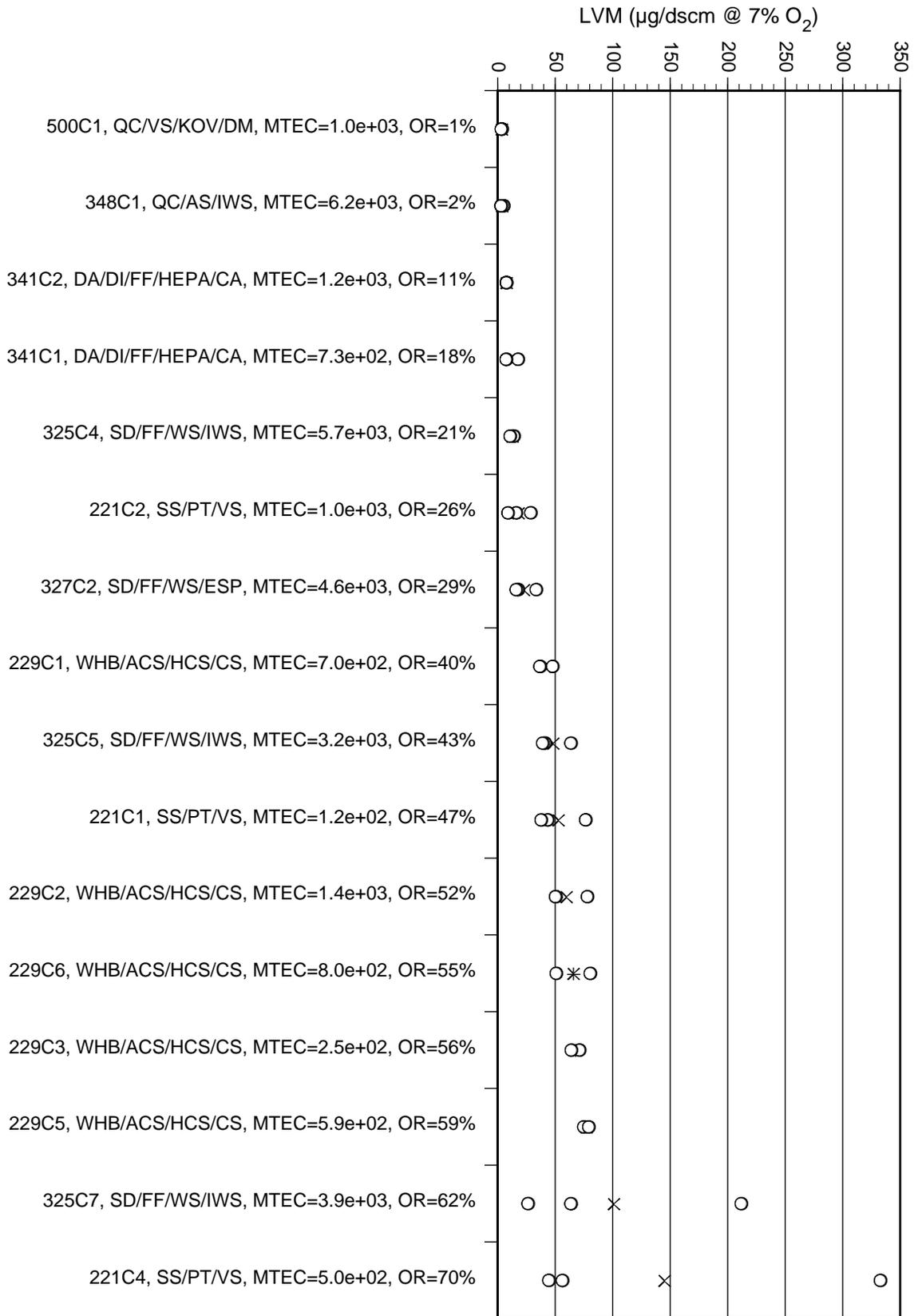


LVM ( $\mu\text{g/dscm}$  @ 7%  $\text{O}_2$ )



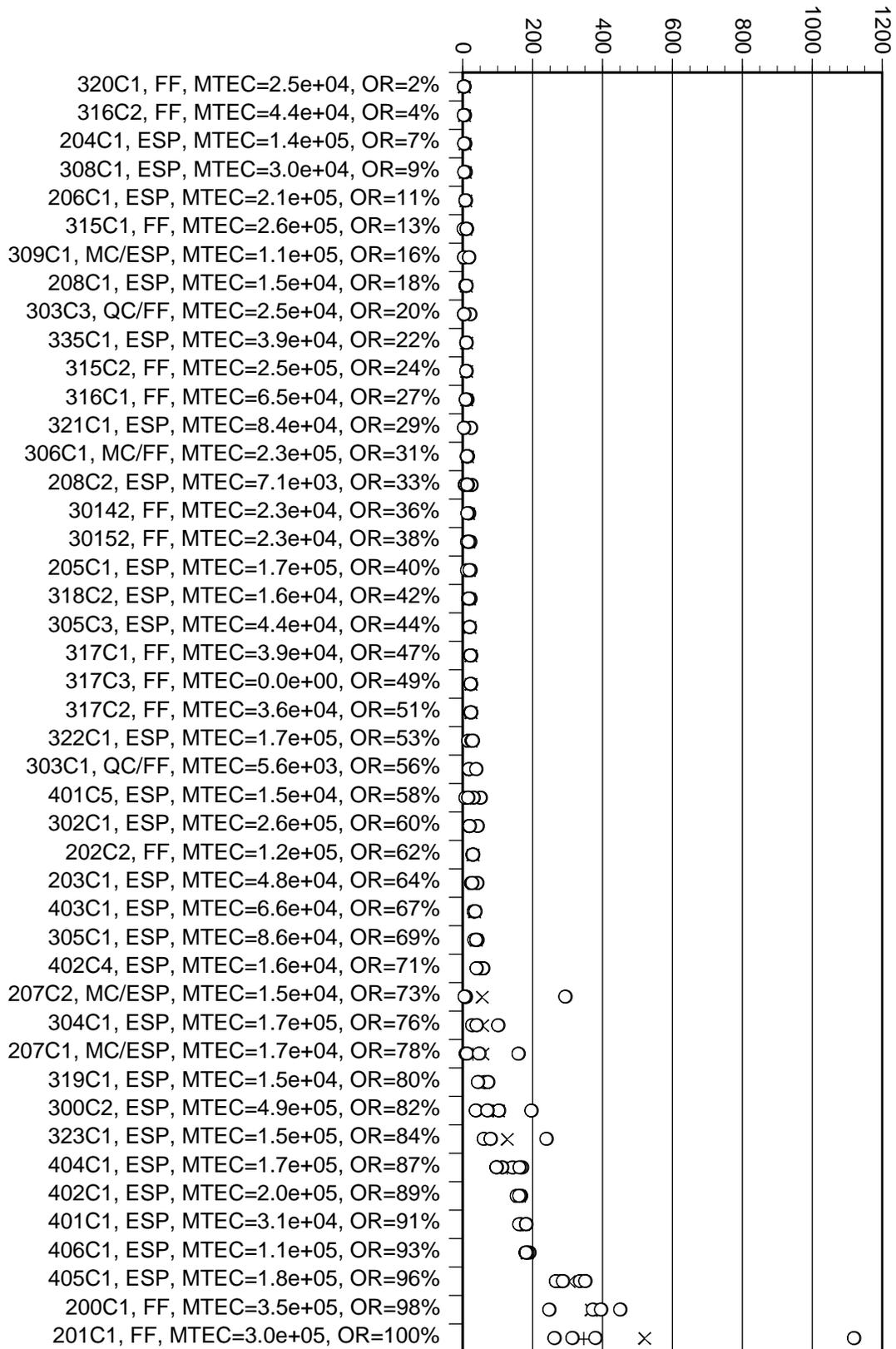
LVM ( $\mu\text{g/dscm}$  @ 7%  $\text{O}_2$ )



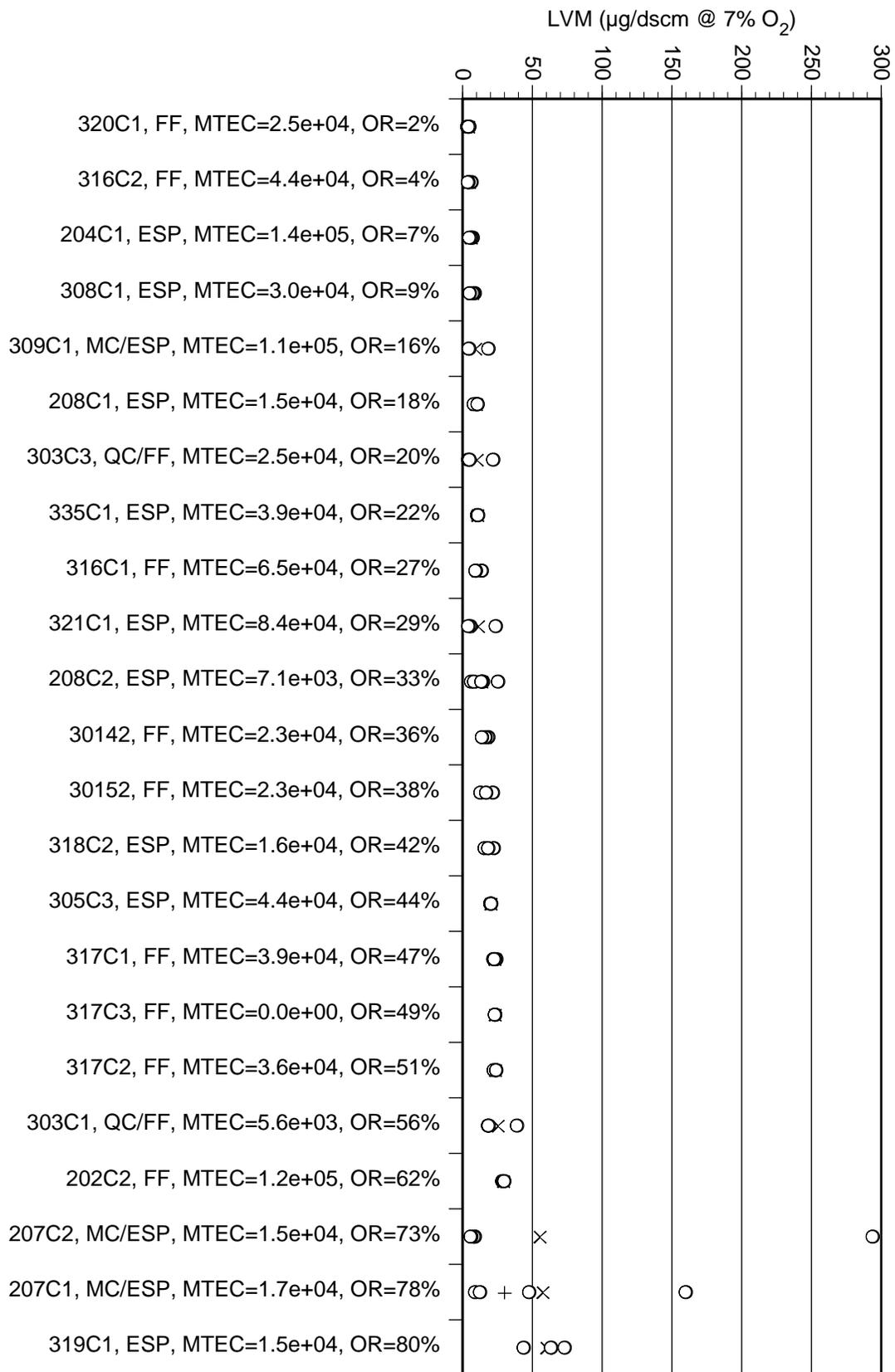


LVM -- Incinerators -- 6% MACT Expanded Universe

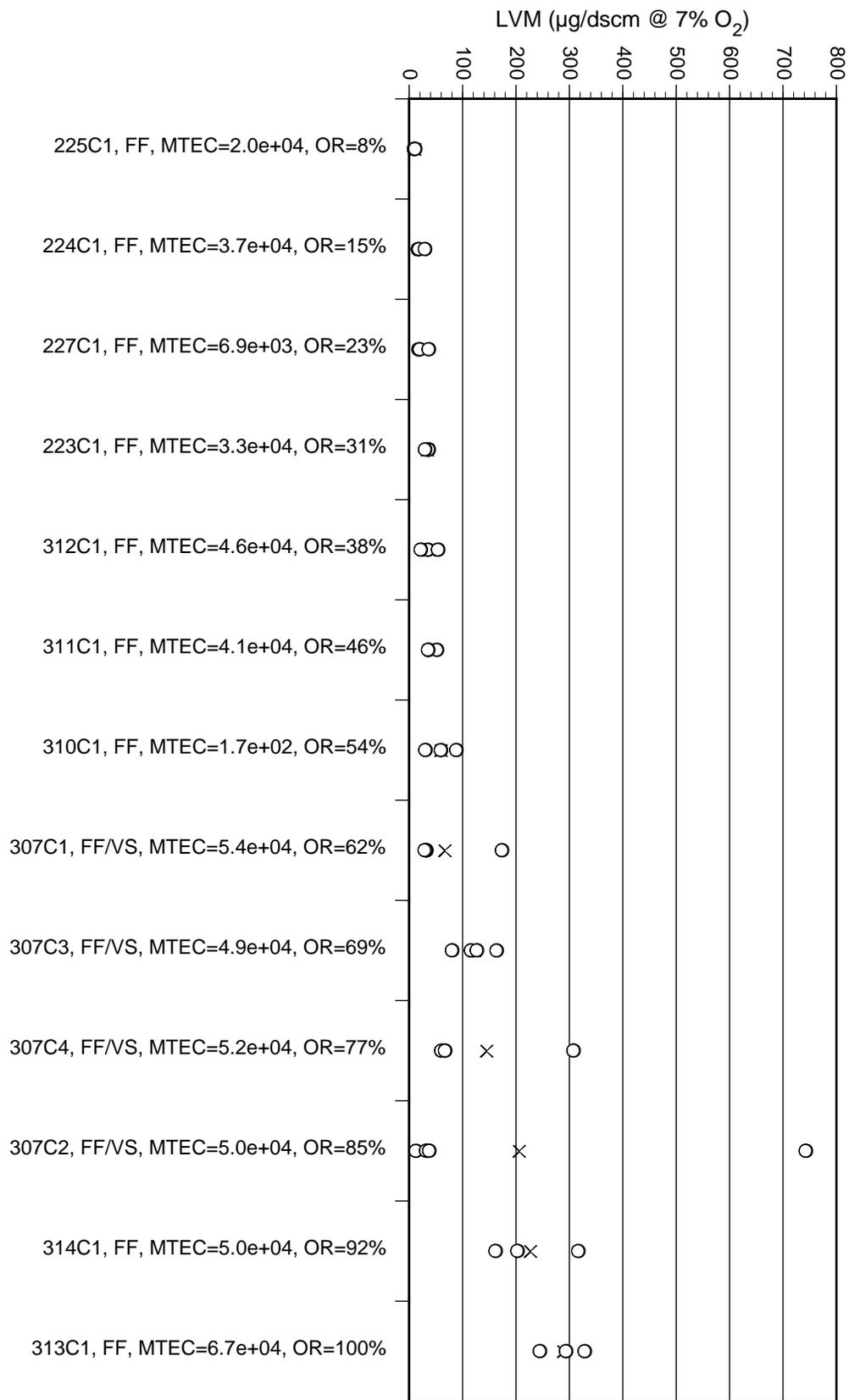
LVM ( $\mu\text{g}/\text{dscm}$  @ 7%  $\text{O}_2$ )



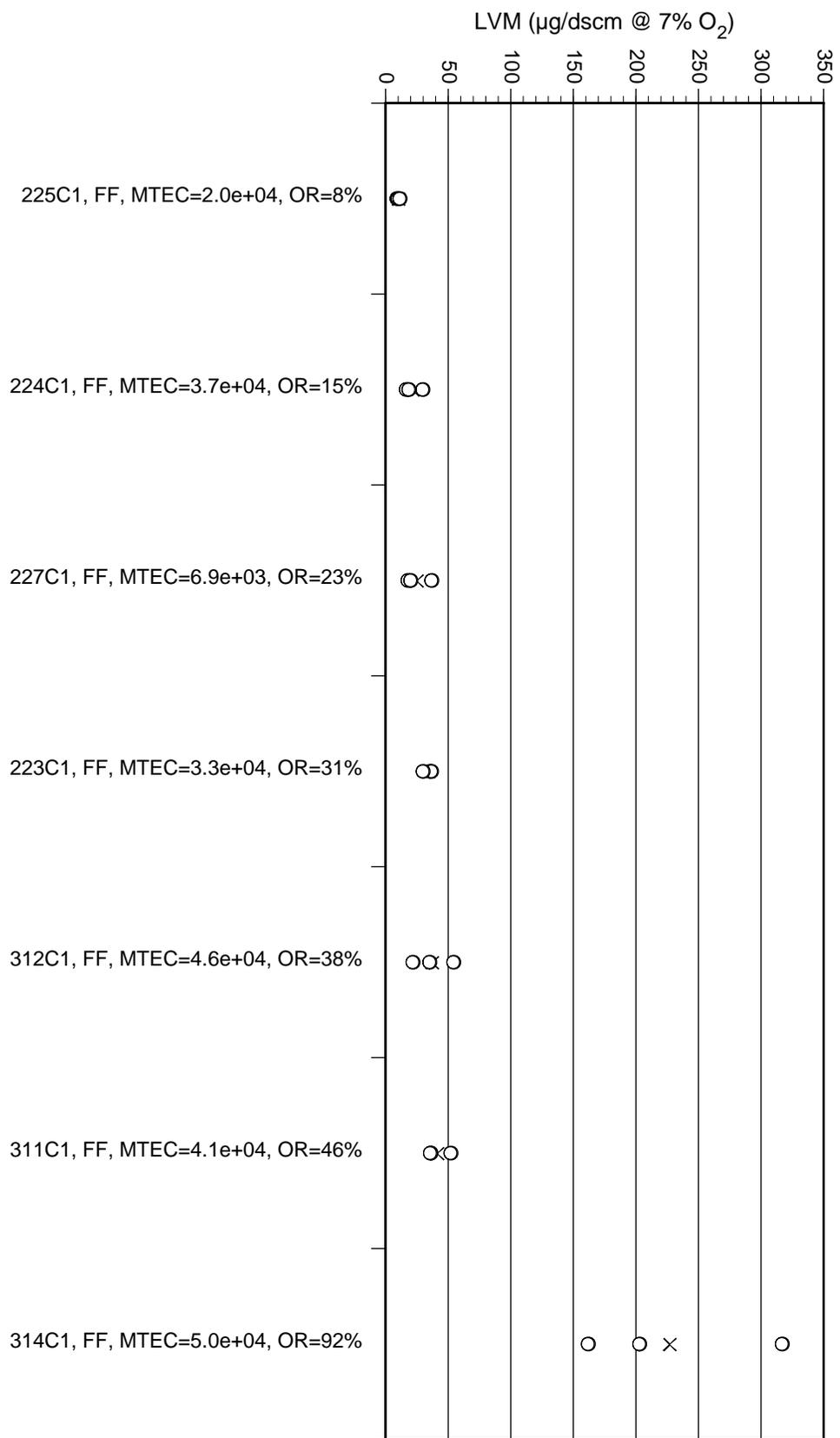
LVM -- Cement Kilns -- Entire Universe



LVM -- Cement Kilns -- 6% MACT Expanded Universe

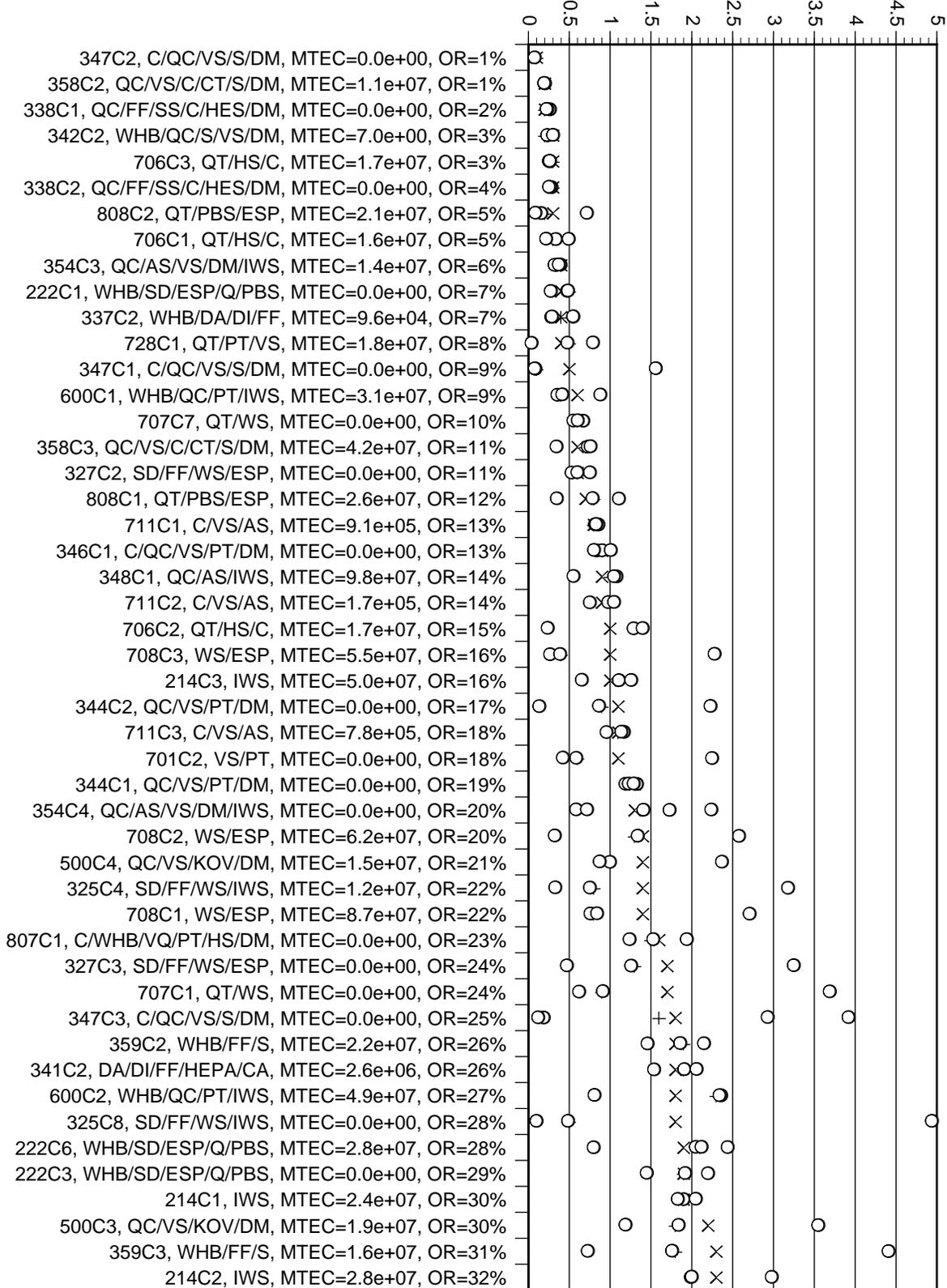


LVM -- LWAKs -- Entire Universe

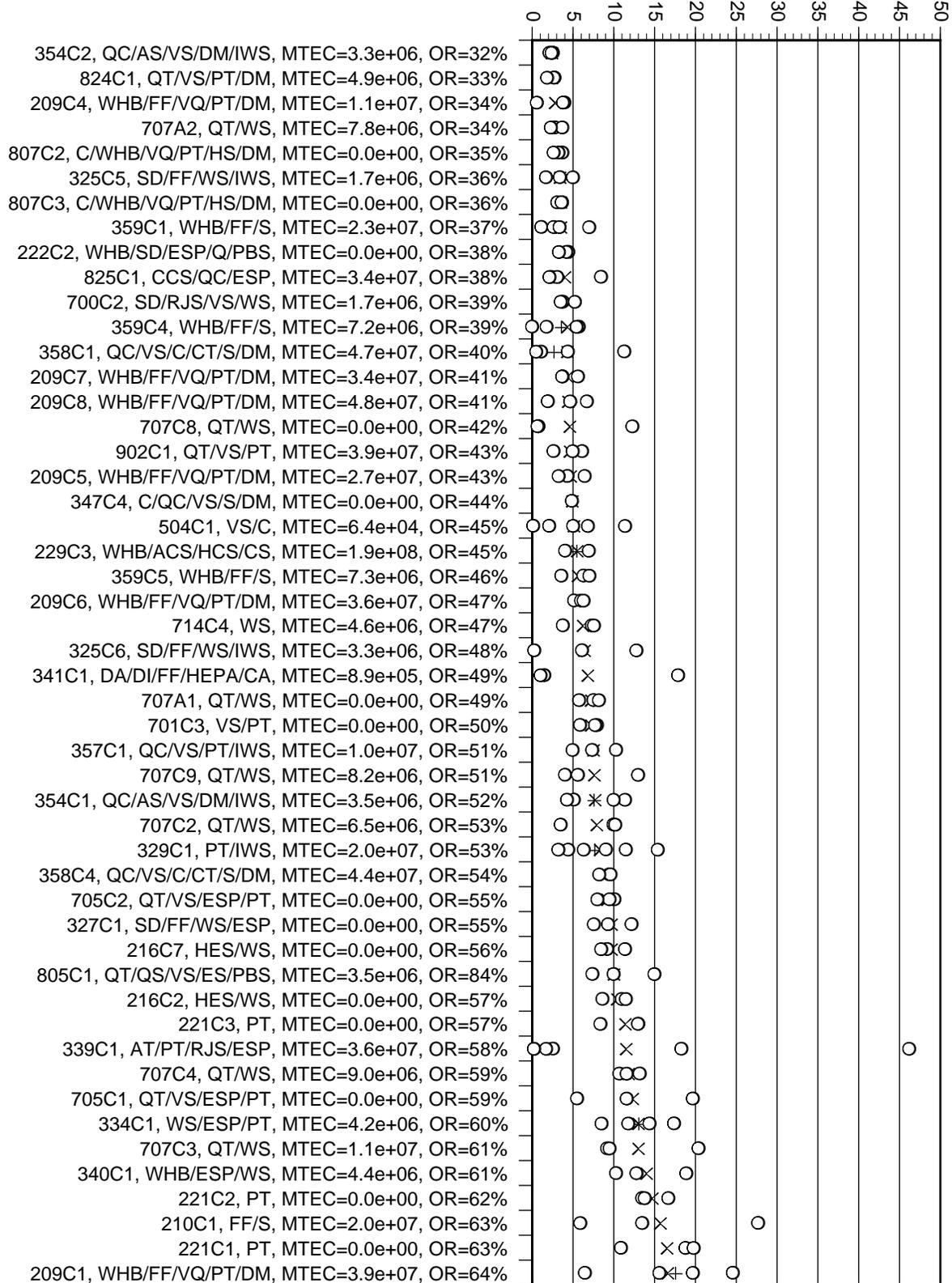


LVM -- LWAKS -- 6% MACT Expanded Universe

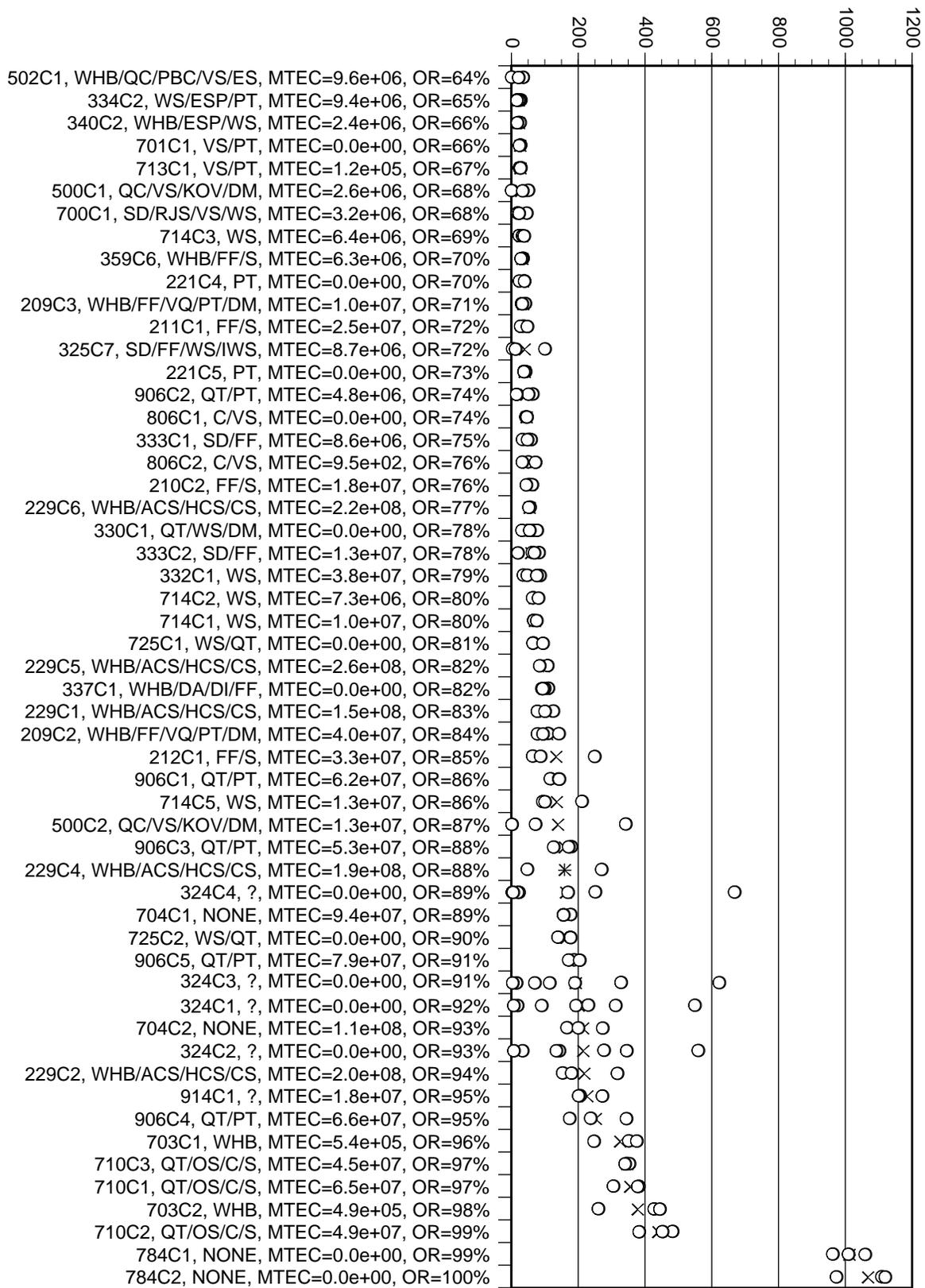
Total Chlorine (ppmv @ 7% O<sub>2</sub>)



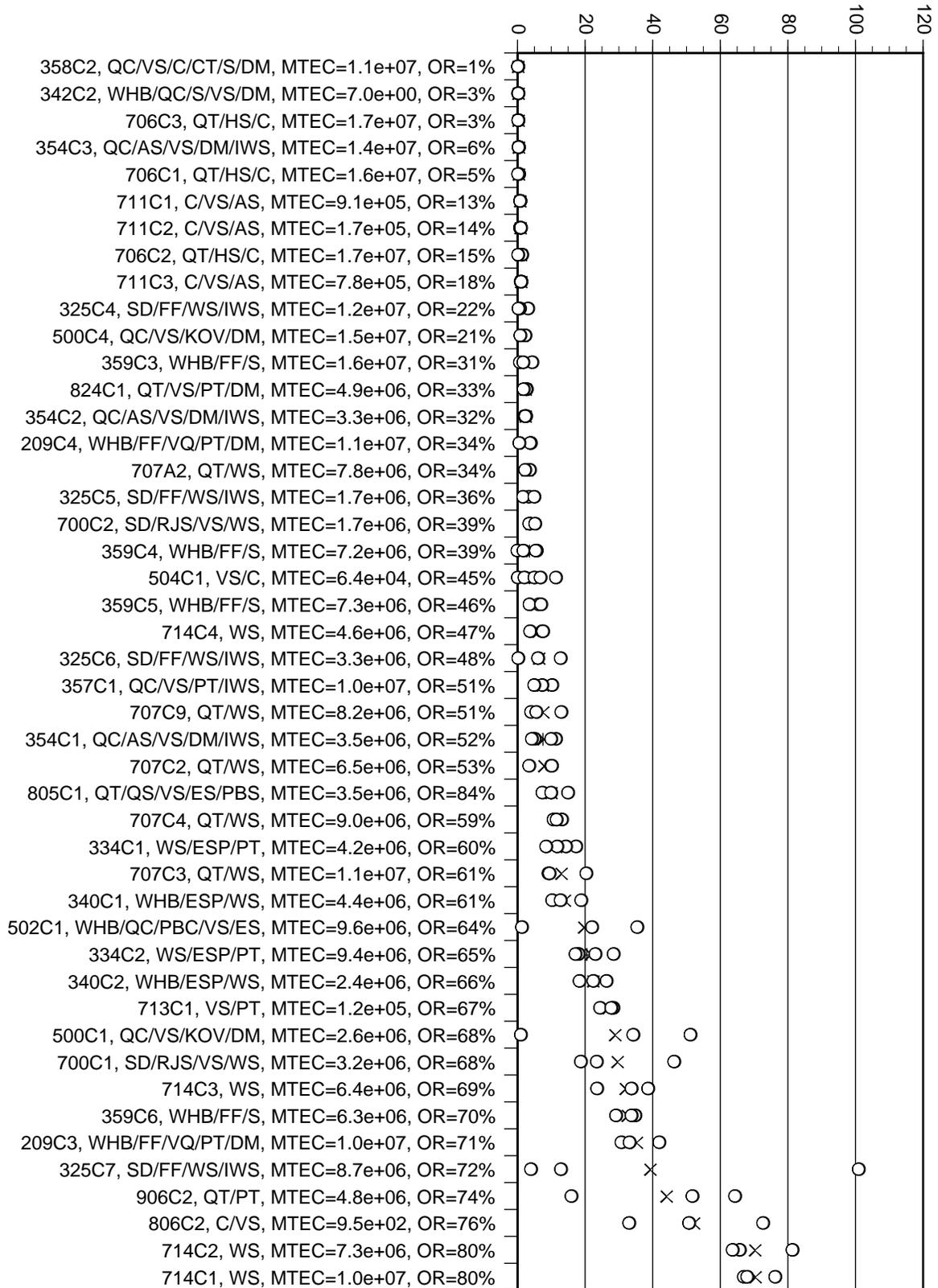
Total Chlorine (ppmv @ 7% O<sub>2</sub>)



Total Chlorine (ppmv @ 7% O<sub>2</sub>)

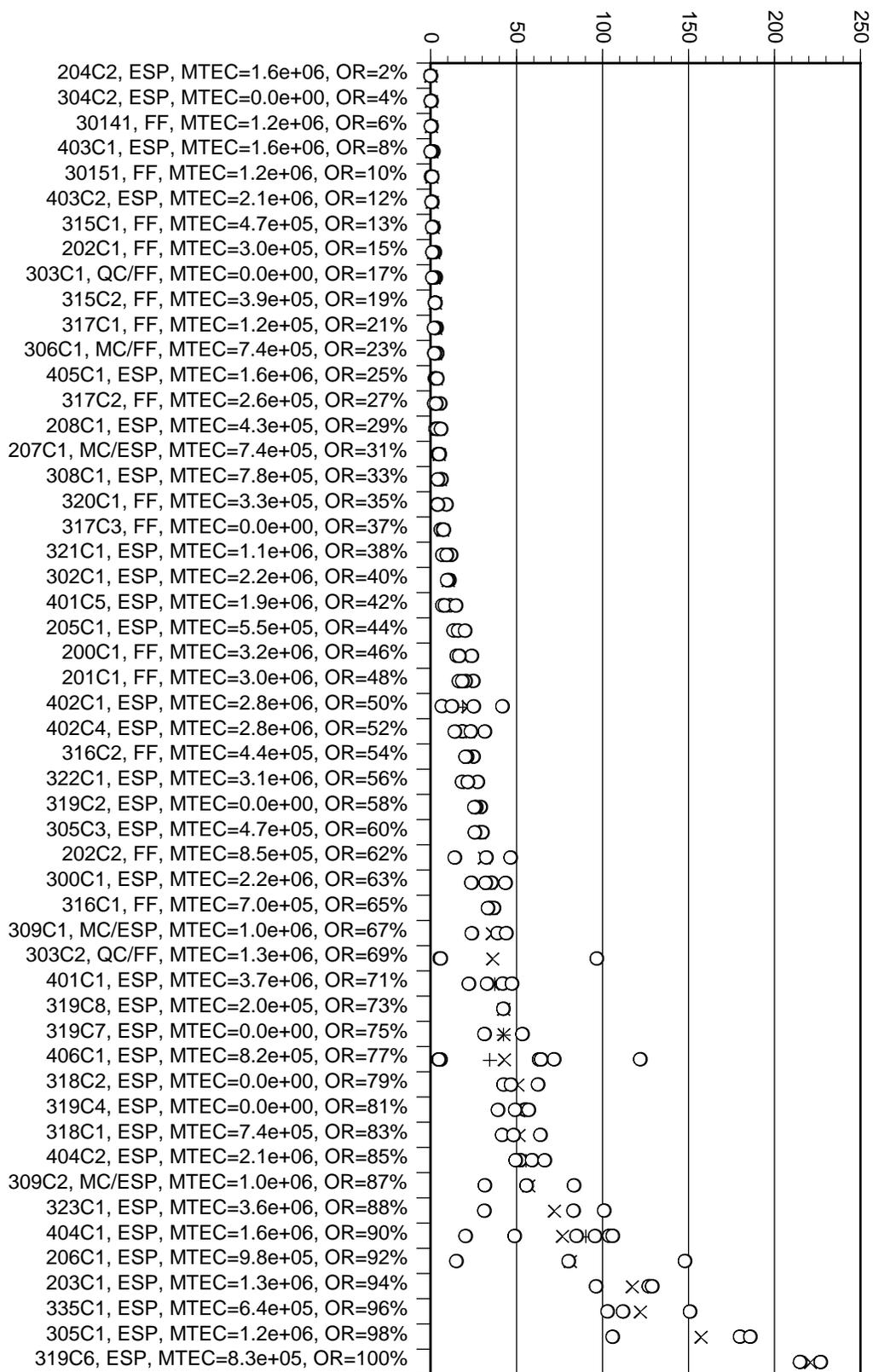


Total Chlorine (ppmv @ 7% O<sub>2</sub>)



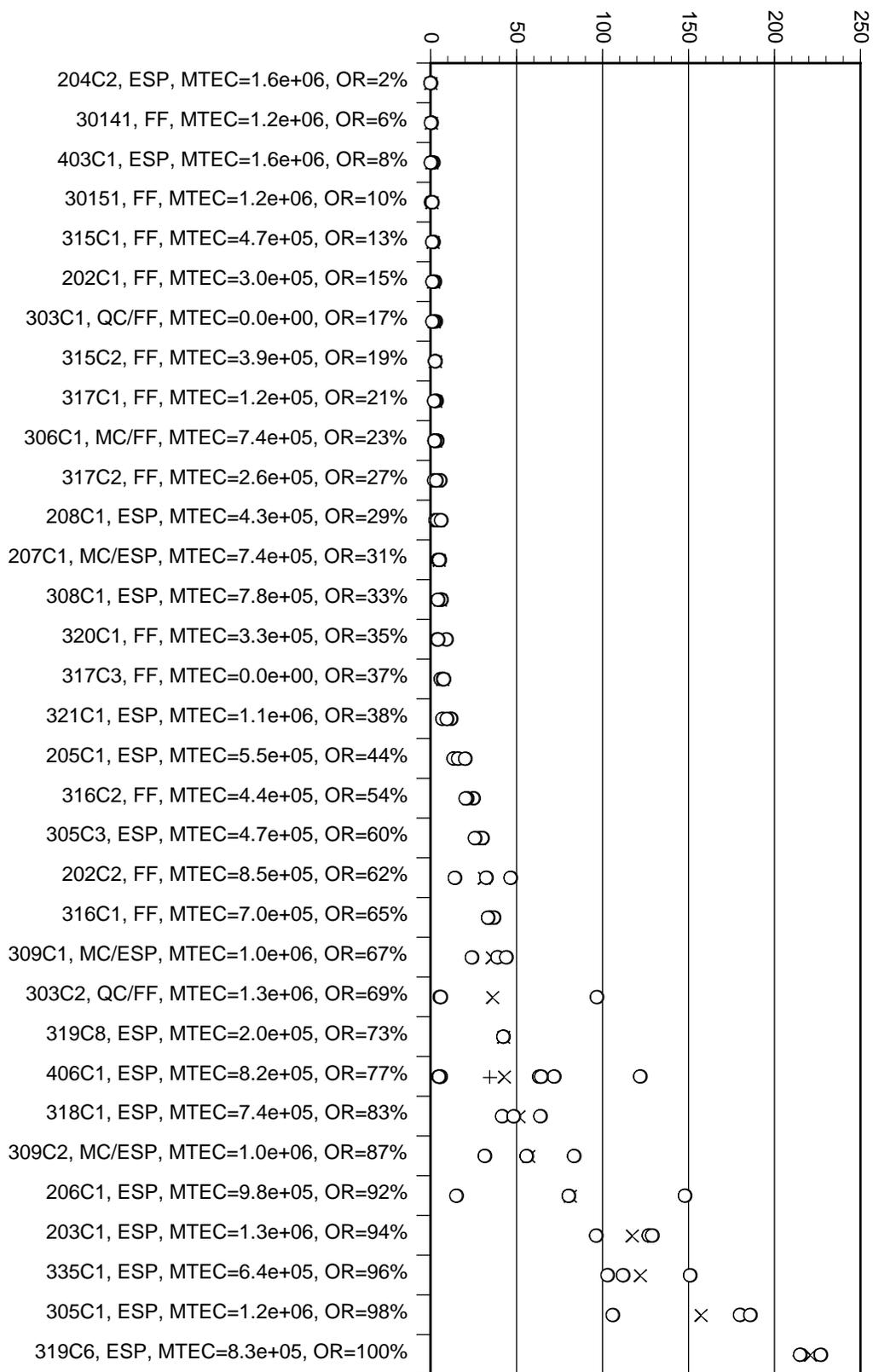
Total Chlorine -- Incinerators -- 6% MACT Expanded Universe

Total Chlorine (ppmv @ 7% O<sub>2</sub>)

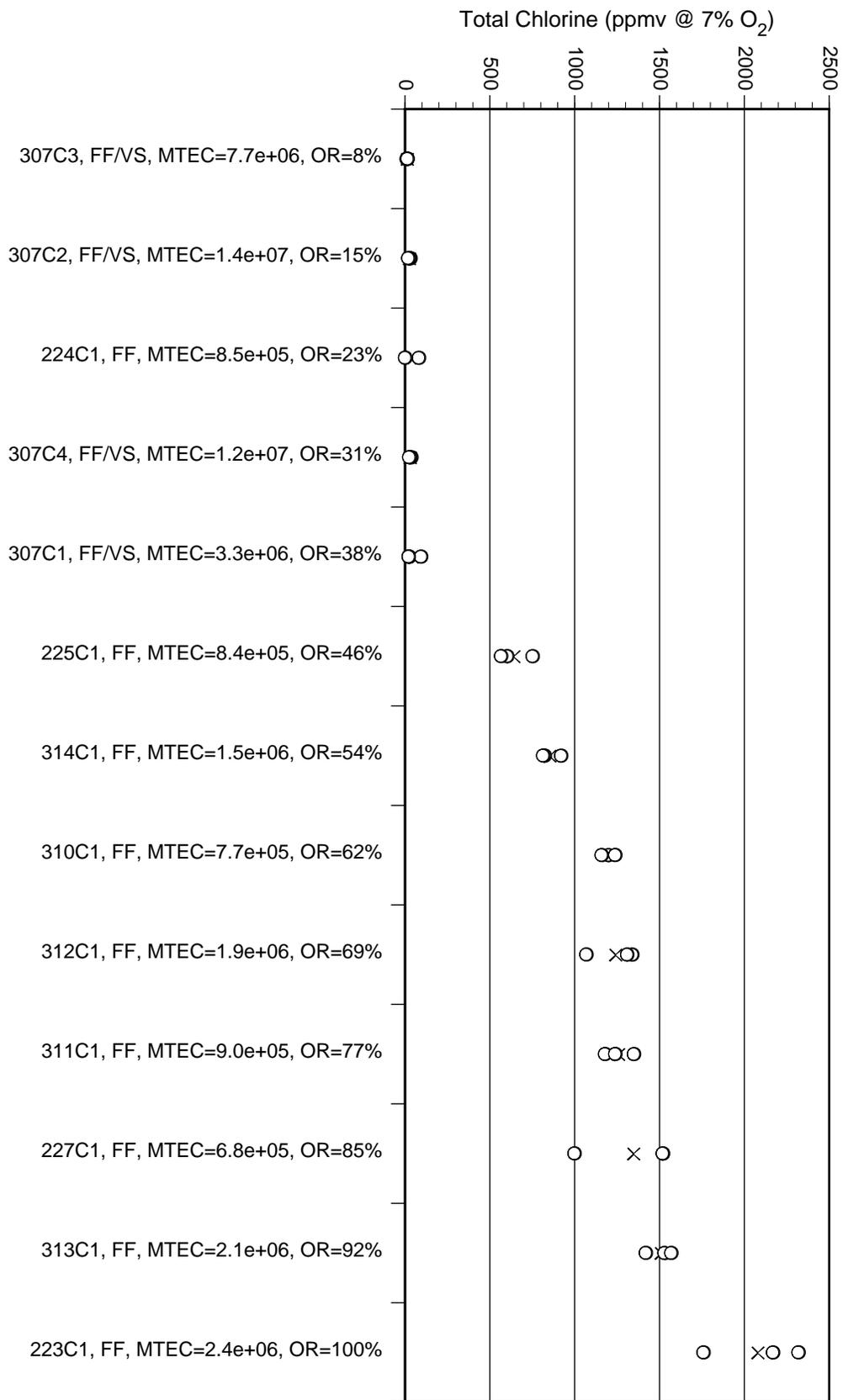


Total Chlorine -- Cement Kilns -- Entire Universe

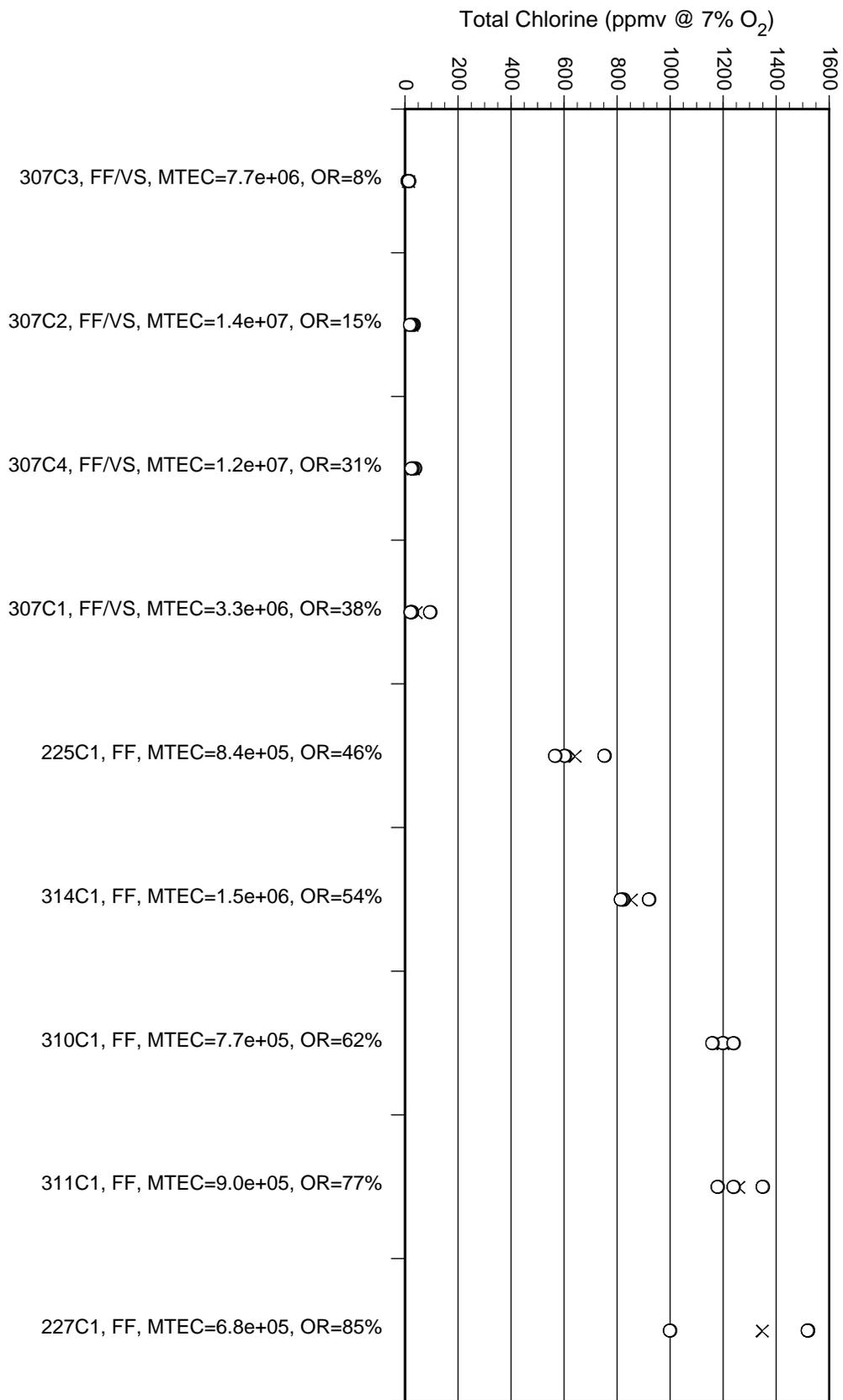
Total Chlorine (ppmv @ 7% O<sub>2</sub>)



Total Chlorine -- Cement Kilns -- 6% MACT Expanded Universe

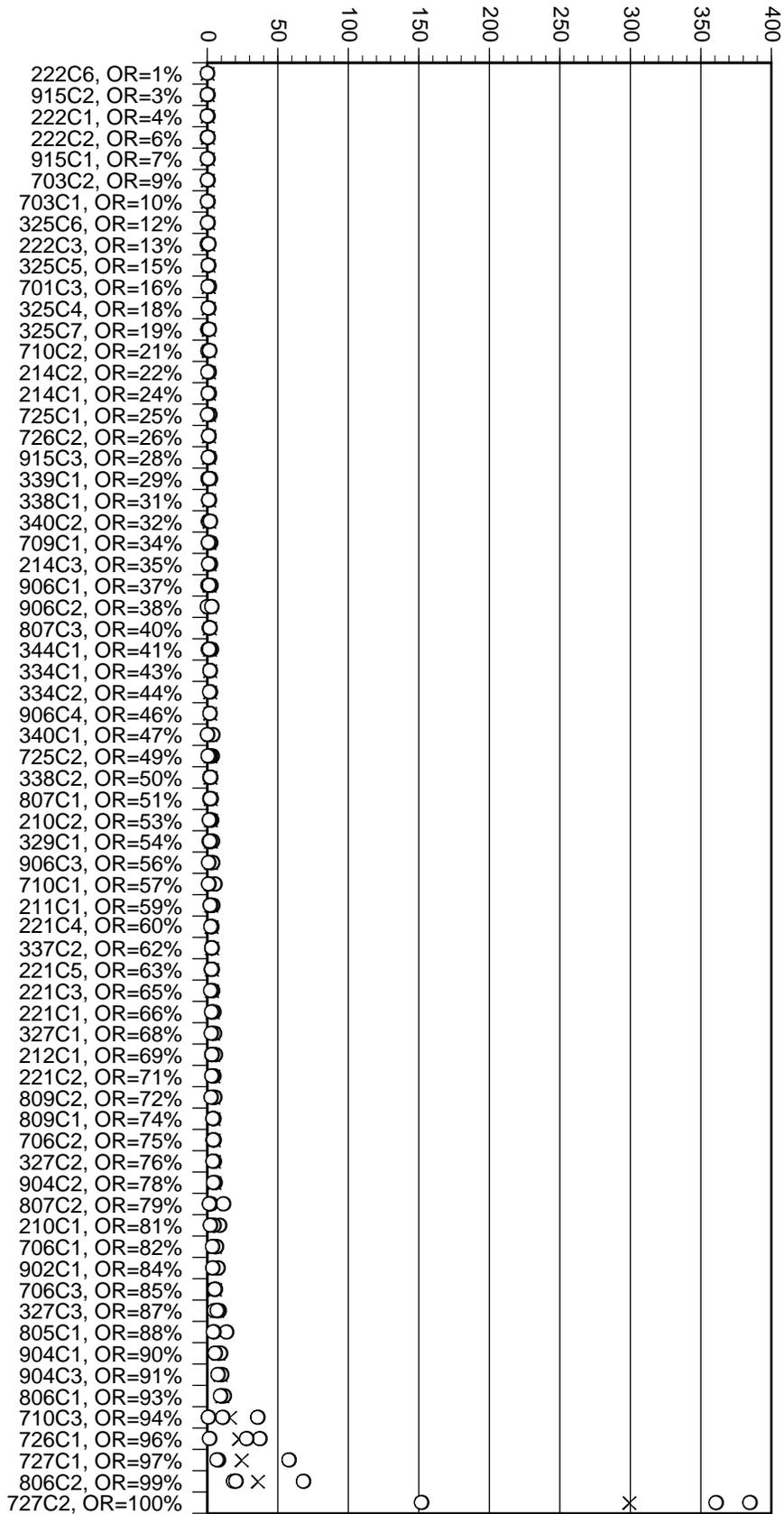


Total Chlorine -- LWAKs -- Entire Universe



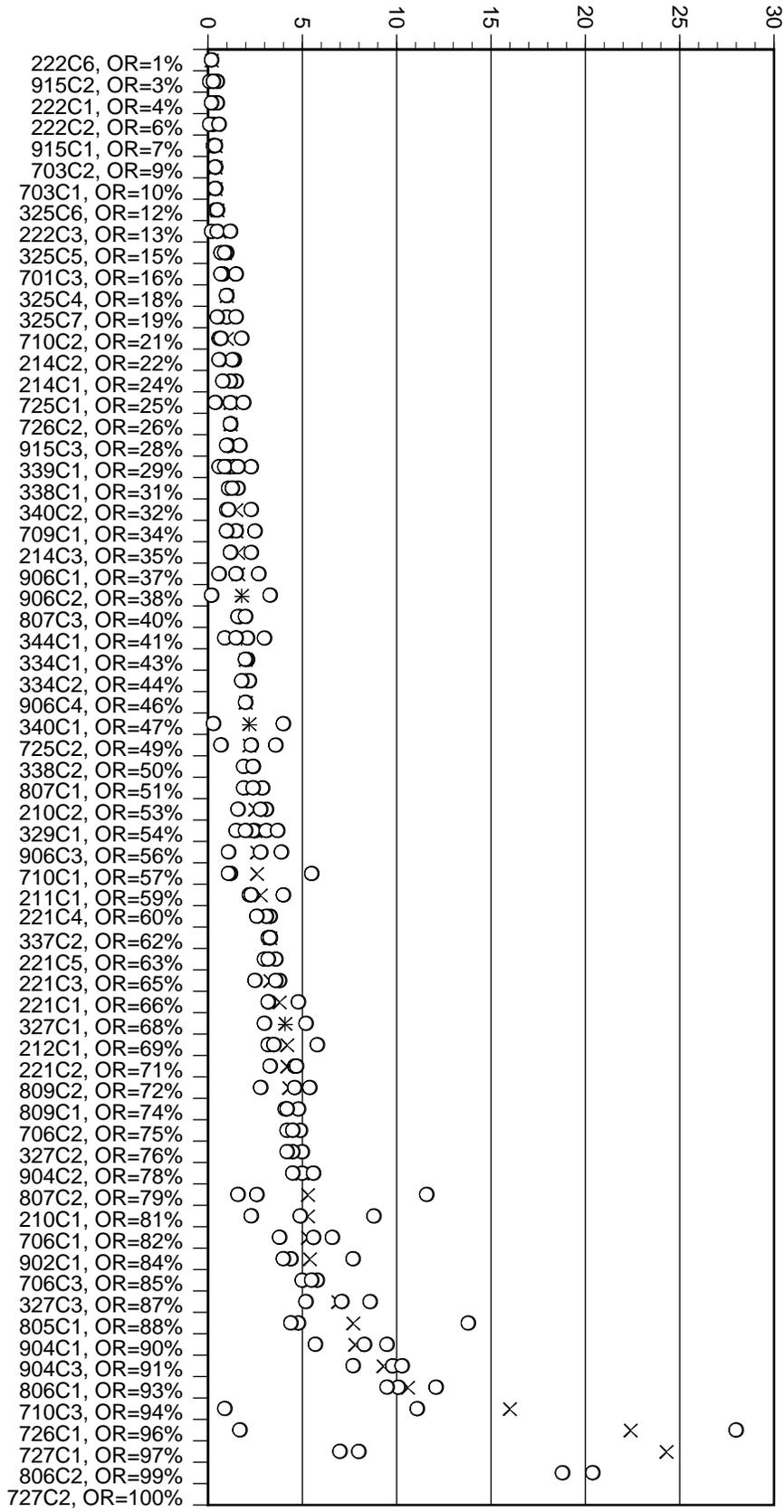
**Total Chlorine -- LWAKs -- 6% MACT Expanded Universe**

HC (Run Average) (ppmv @ 7% O<sub>2</sub>)



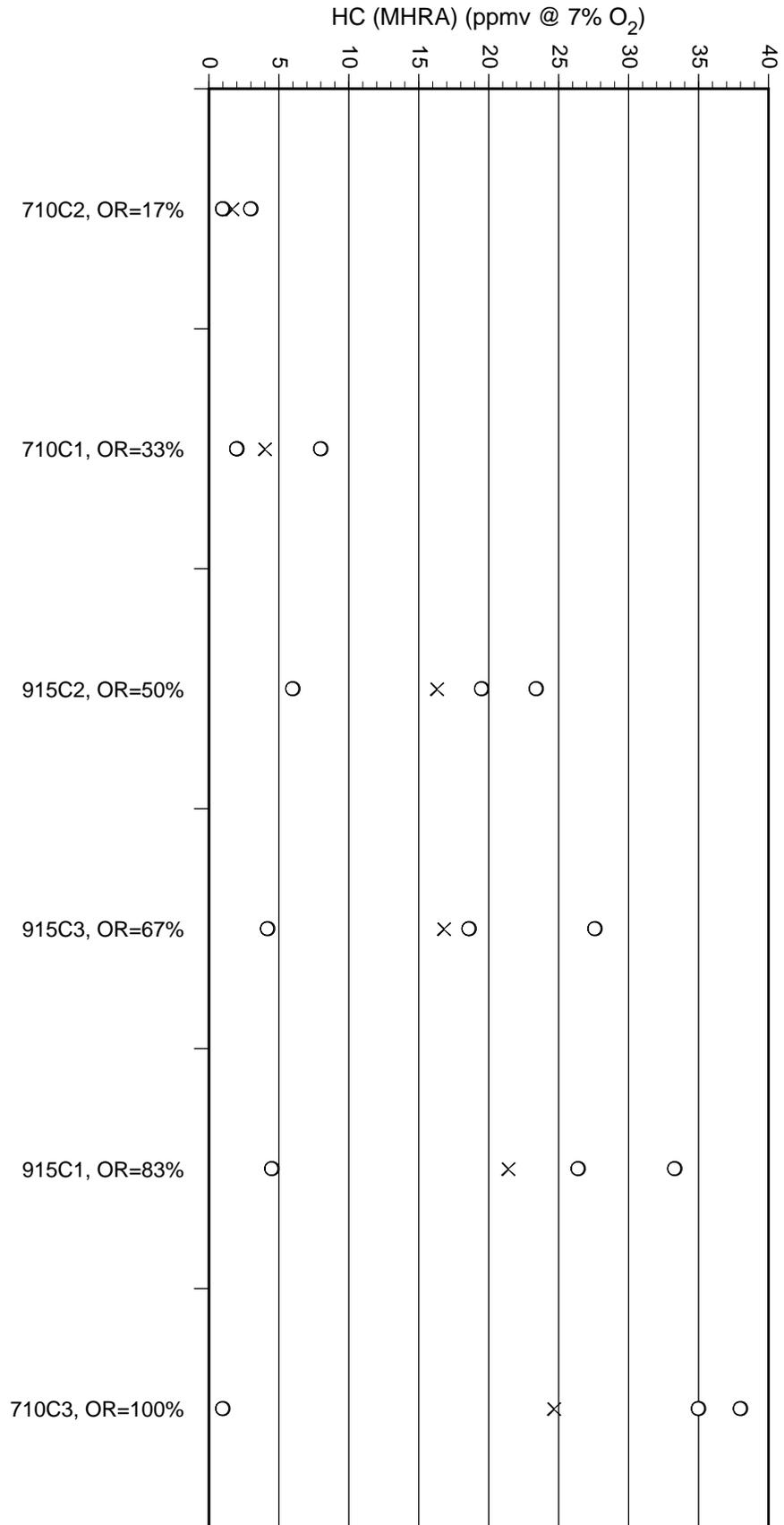
HC (RA) -- Incinerators -- Entire Universe

HC (Run Average) (ppmv @ 7% O<sub>2</sub>)

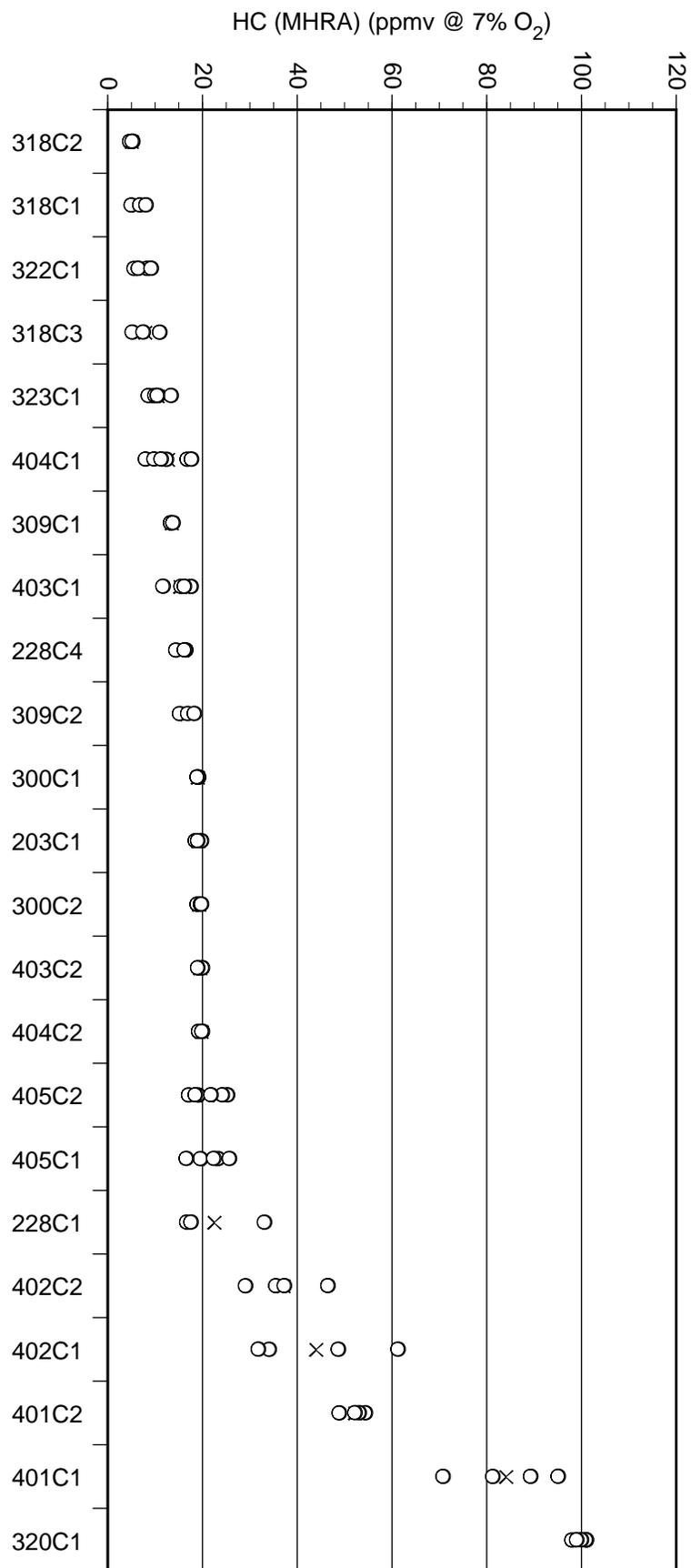


HC (RA) -- Incinerators -- Entire Universe

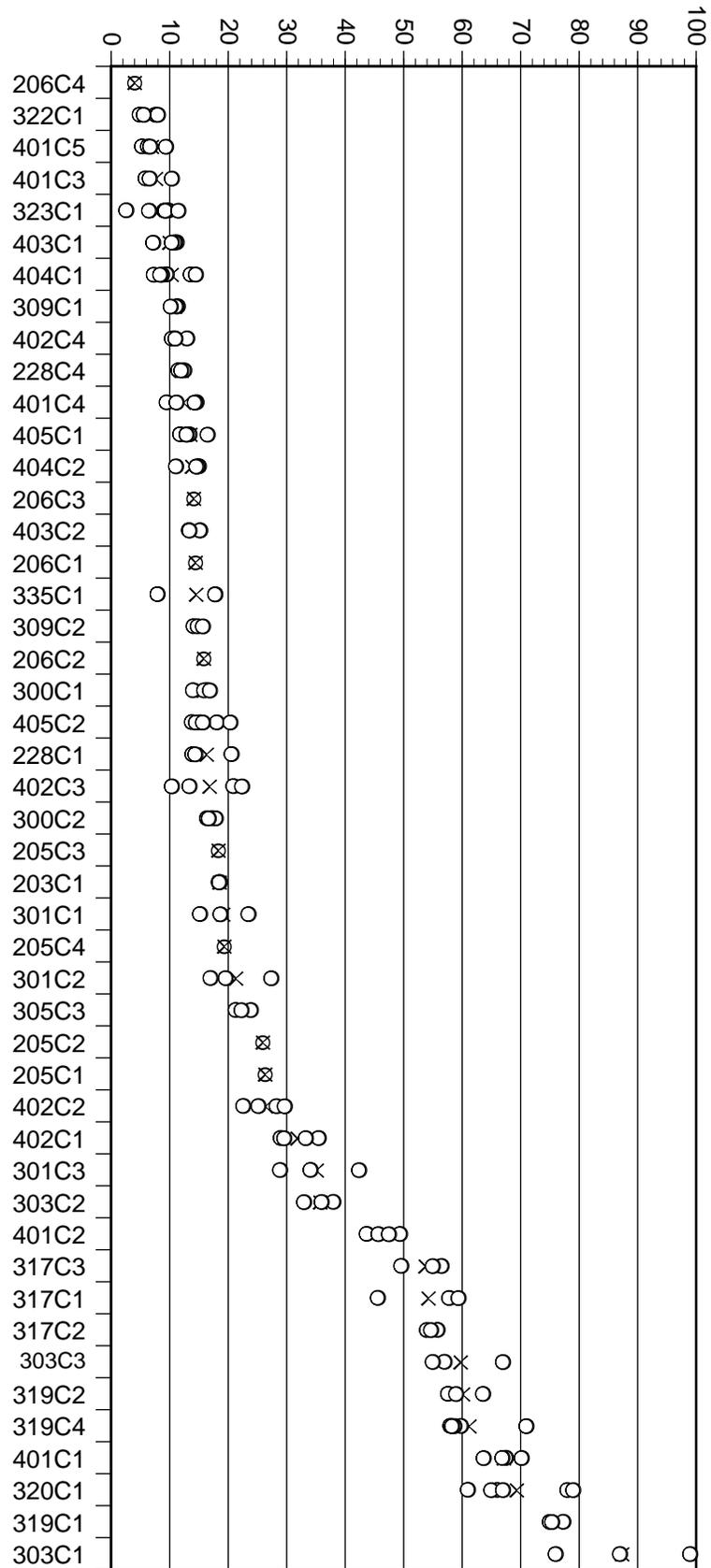
**HC (MHRA) -- Incinerators -- Entire Universe**



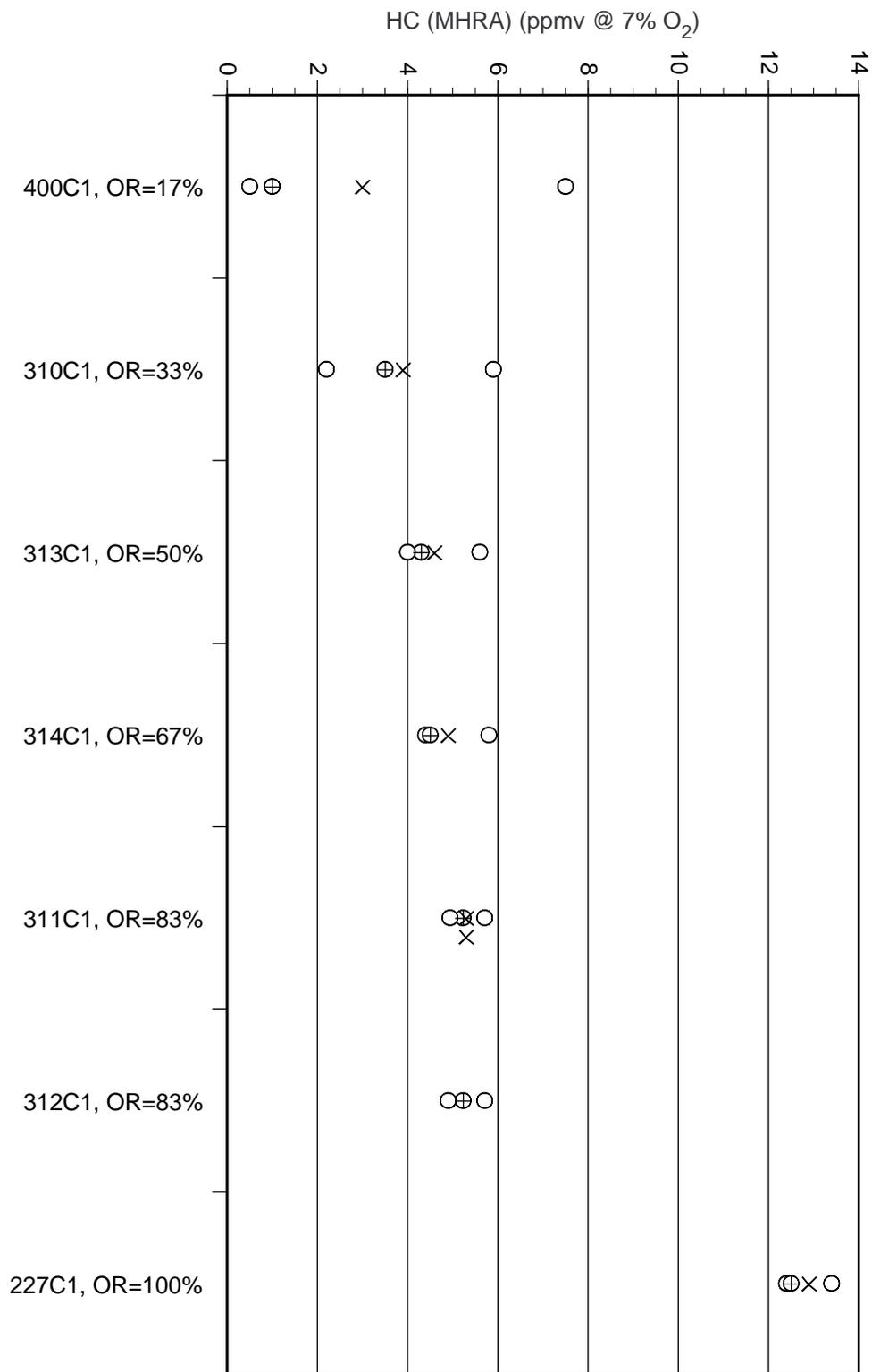
HC (MHRA) -- Cement Kiln Main -- Entire Universe



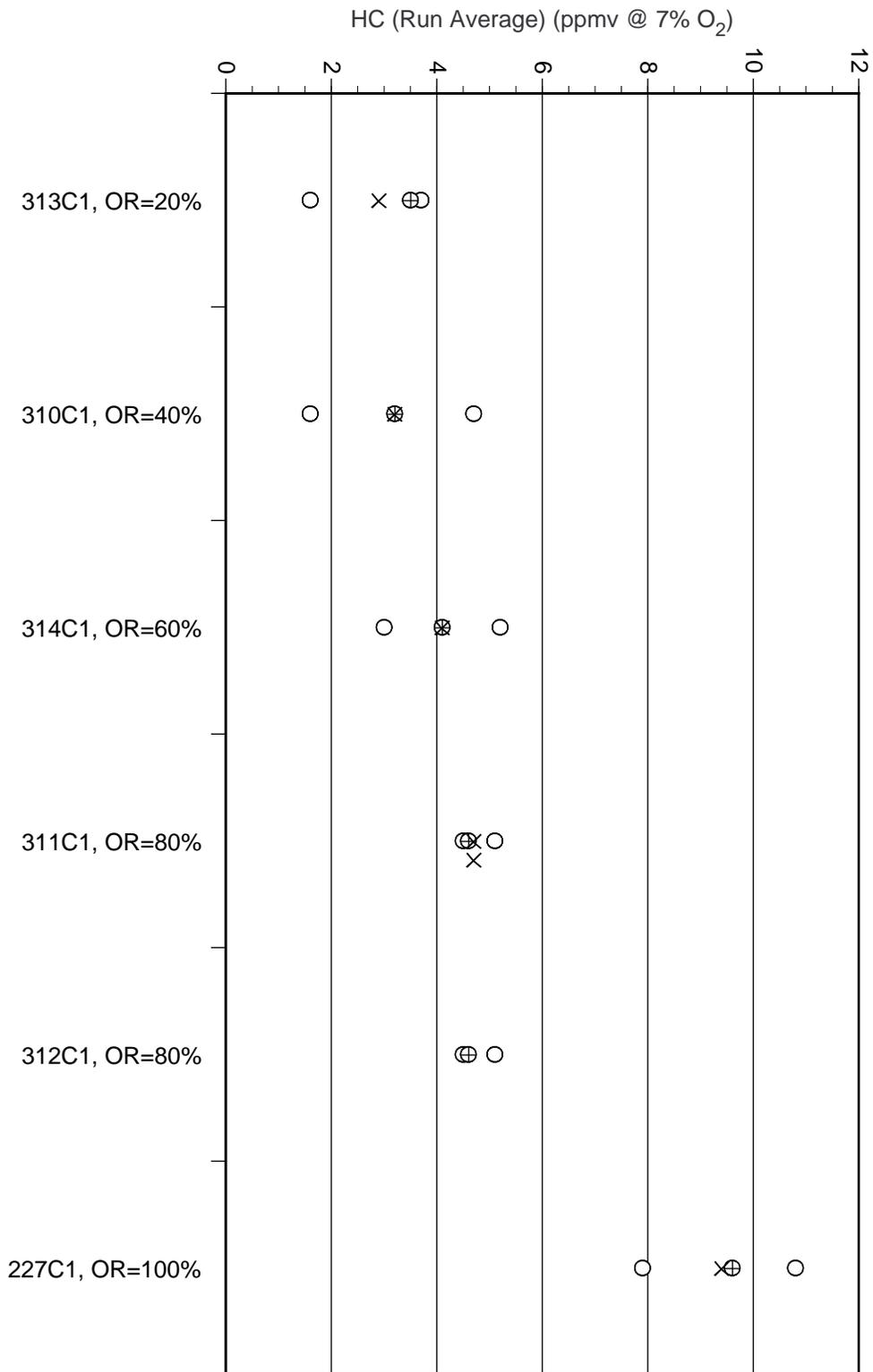
HC (Run Average) (ppmv @ 7% O<sub>2</sub>)



HC (RA) -- Cement Kiln Main -- Entire Universe

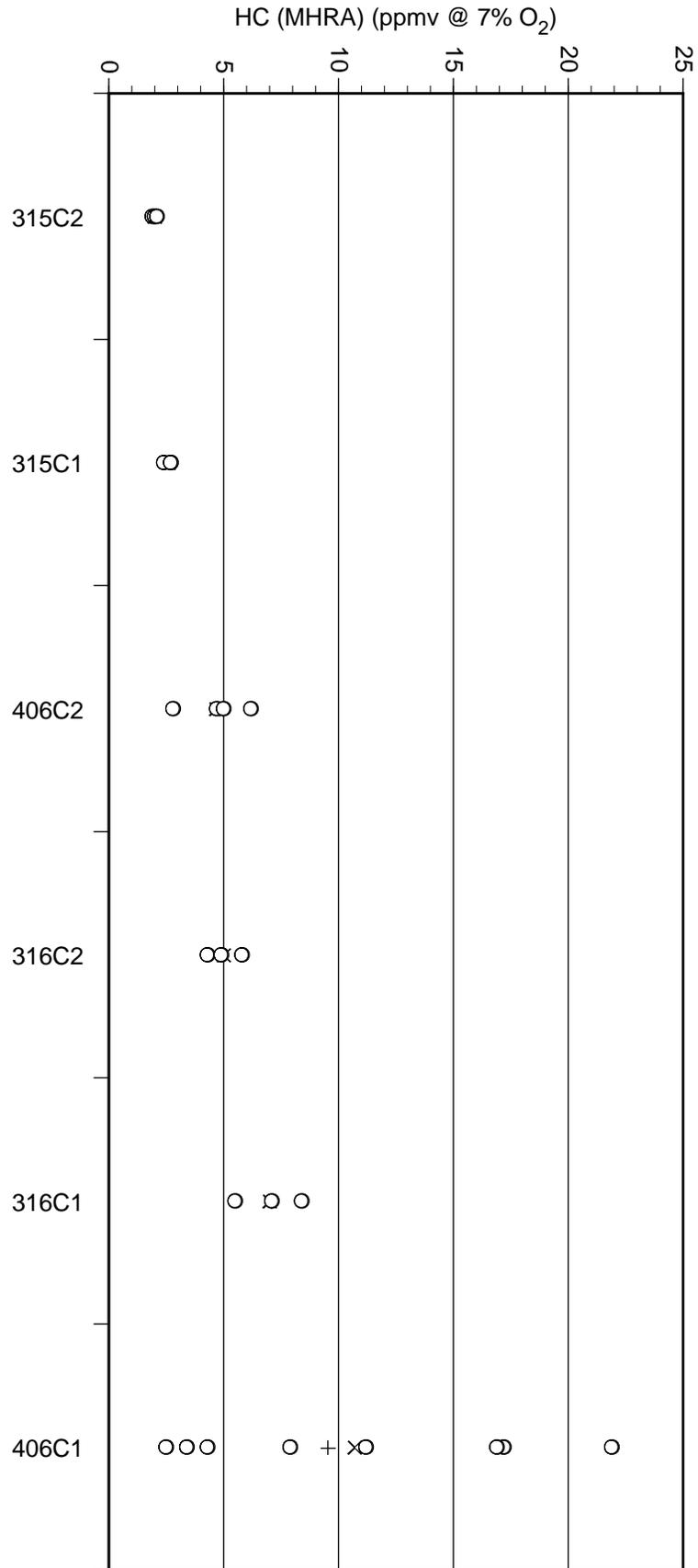


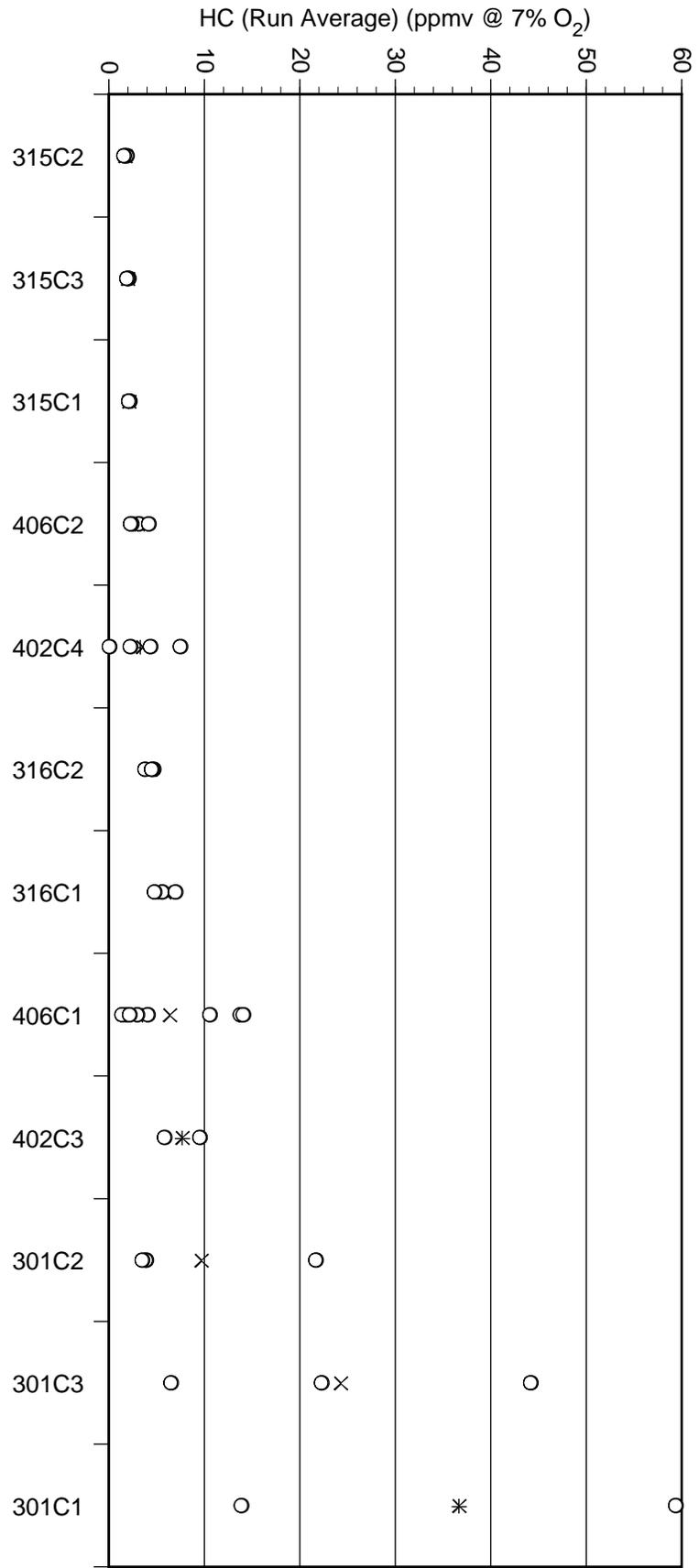
HC (MHRA) -- LWAKS -- Entire Universe



HC (RA) -- LWAKs -- Entire Universe

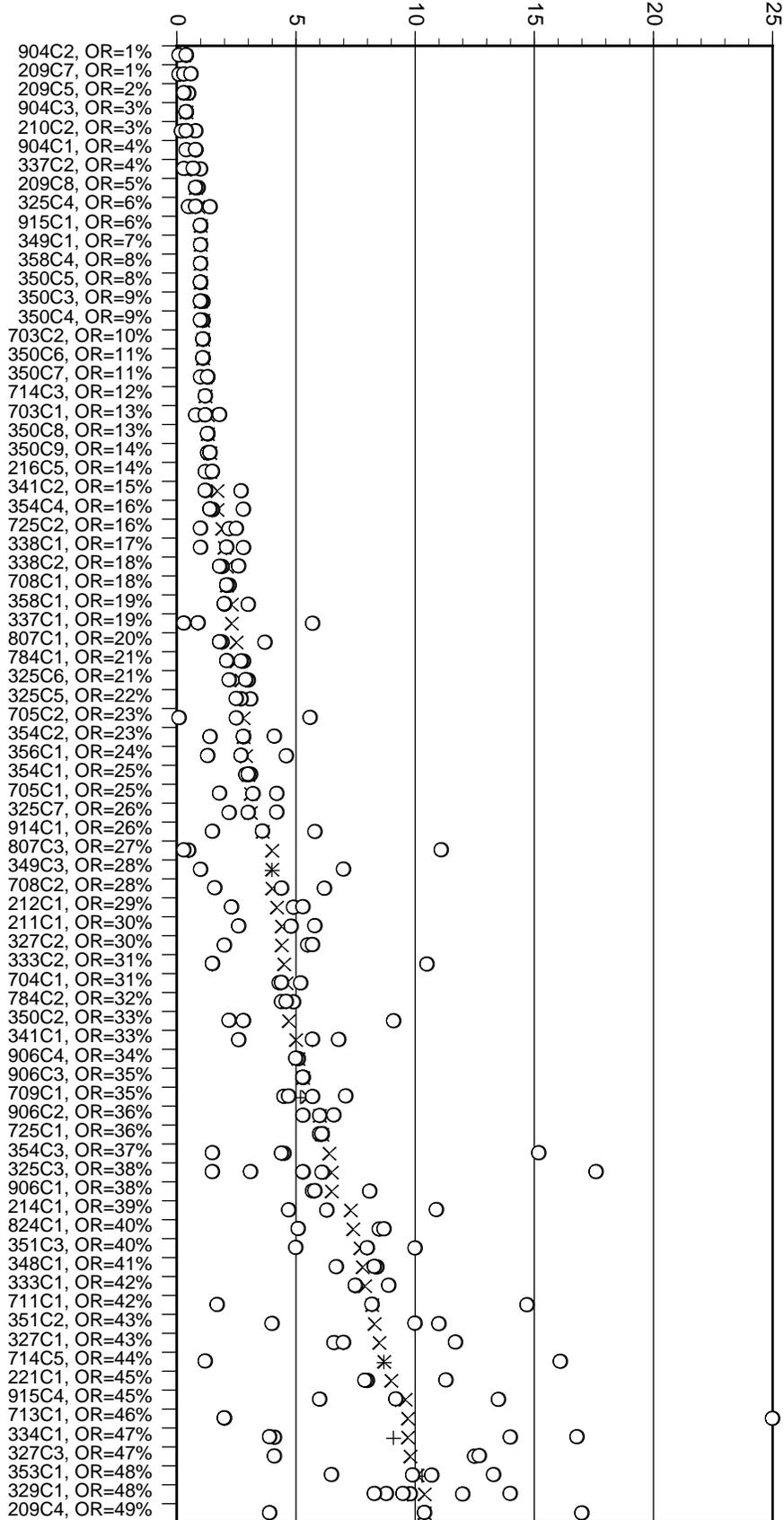
HC (MHRA) -- Cement Kiln Bypass -- Entire Universe



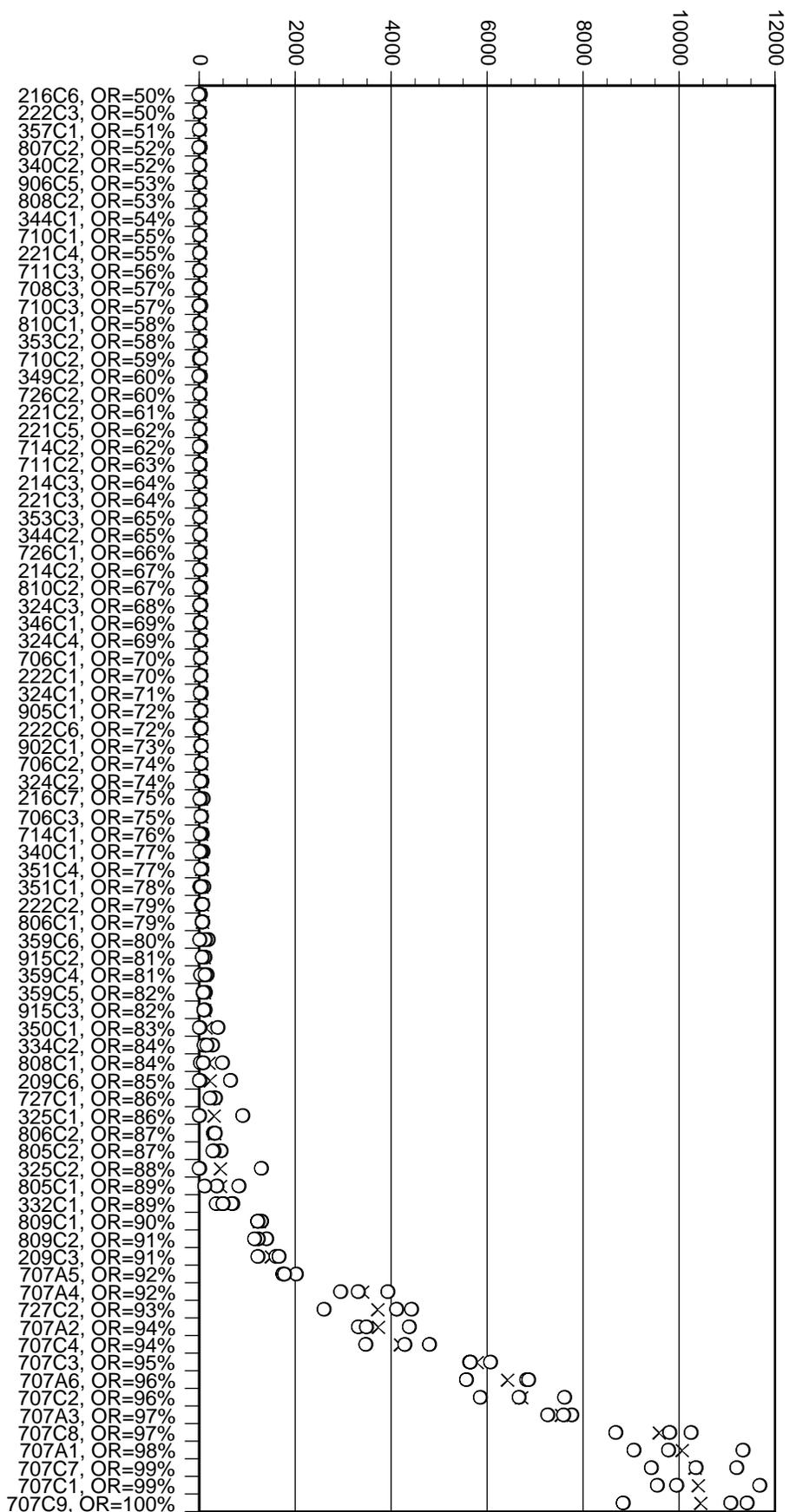


HC (RA) -- Cement Kiln Bypass -- Entire Universe

CO (Run Average) (ppmv @ 7% O<sub>2</sub>)

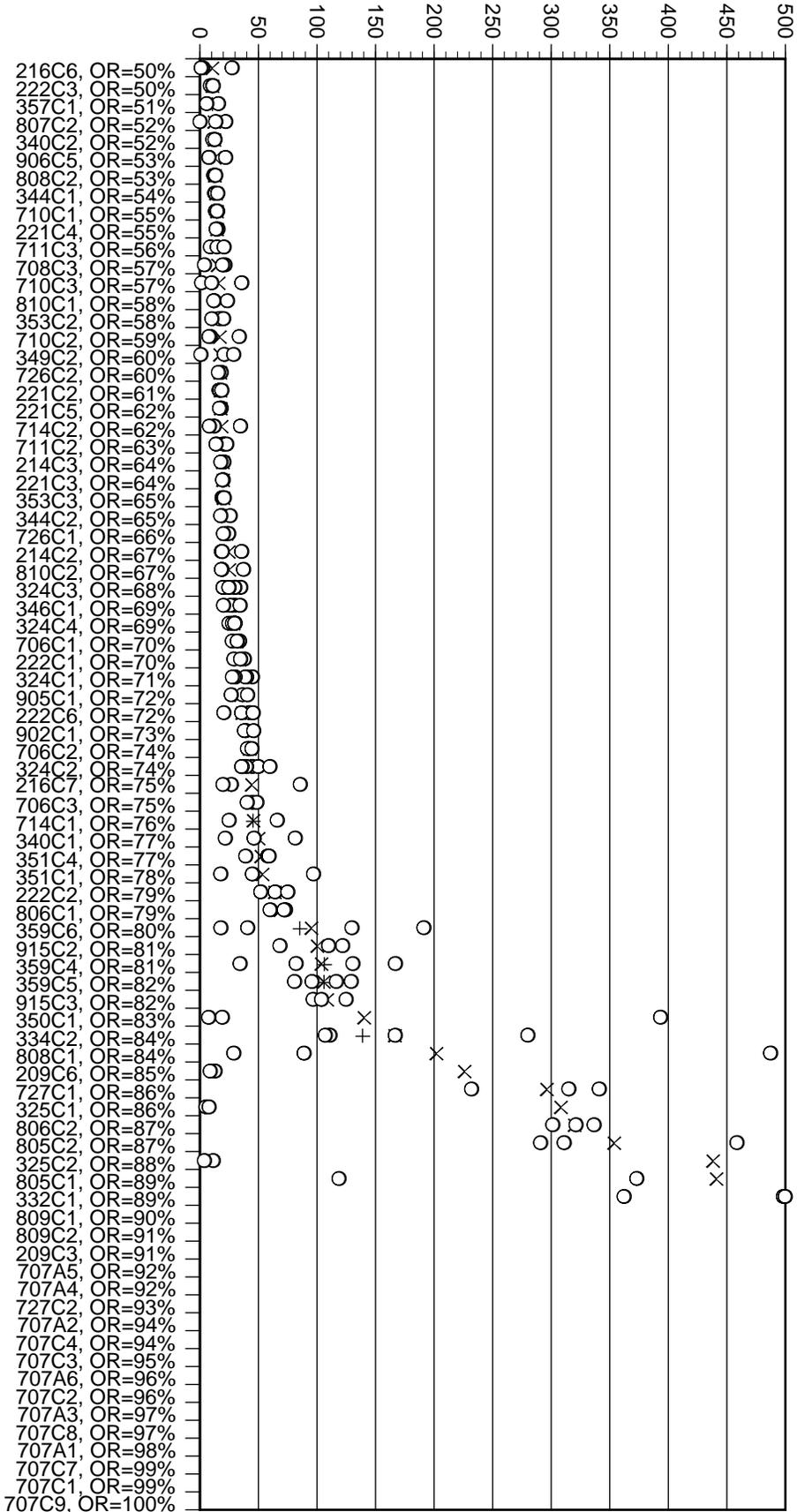


CO (Run Average) (ppmv @ 7% O<sub>2</sub>)

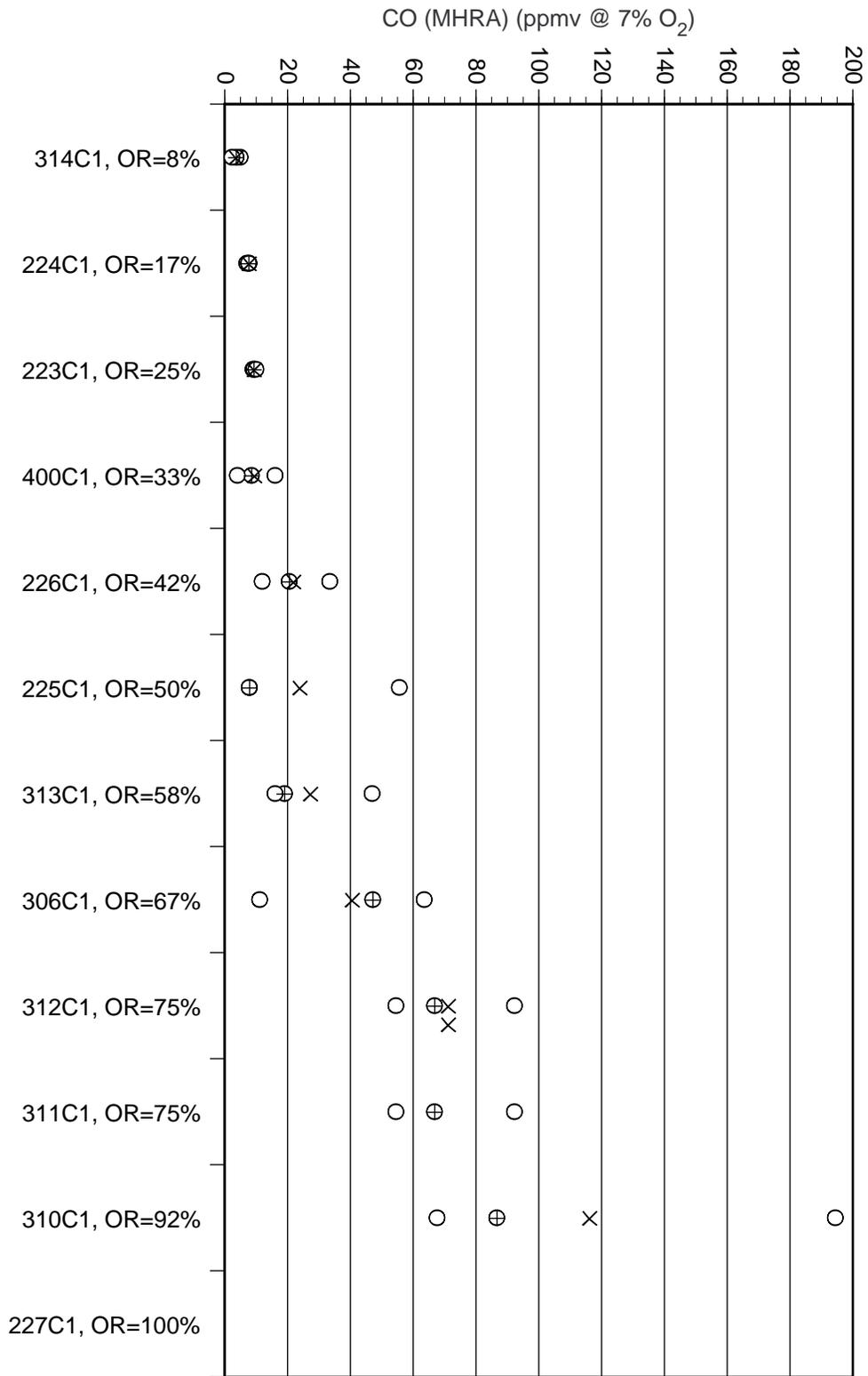


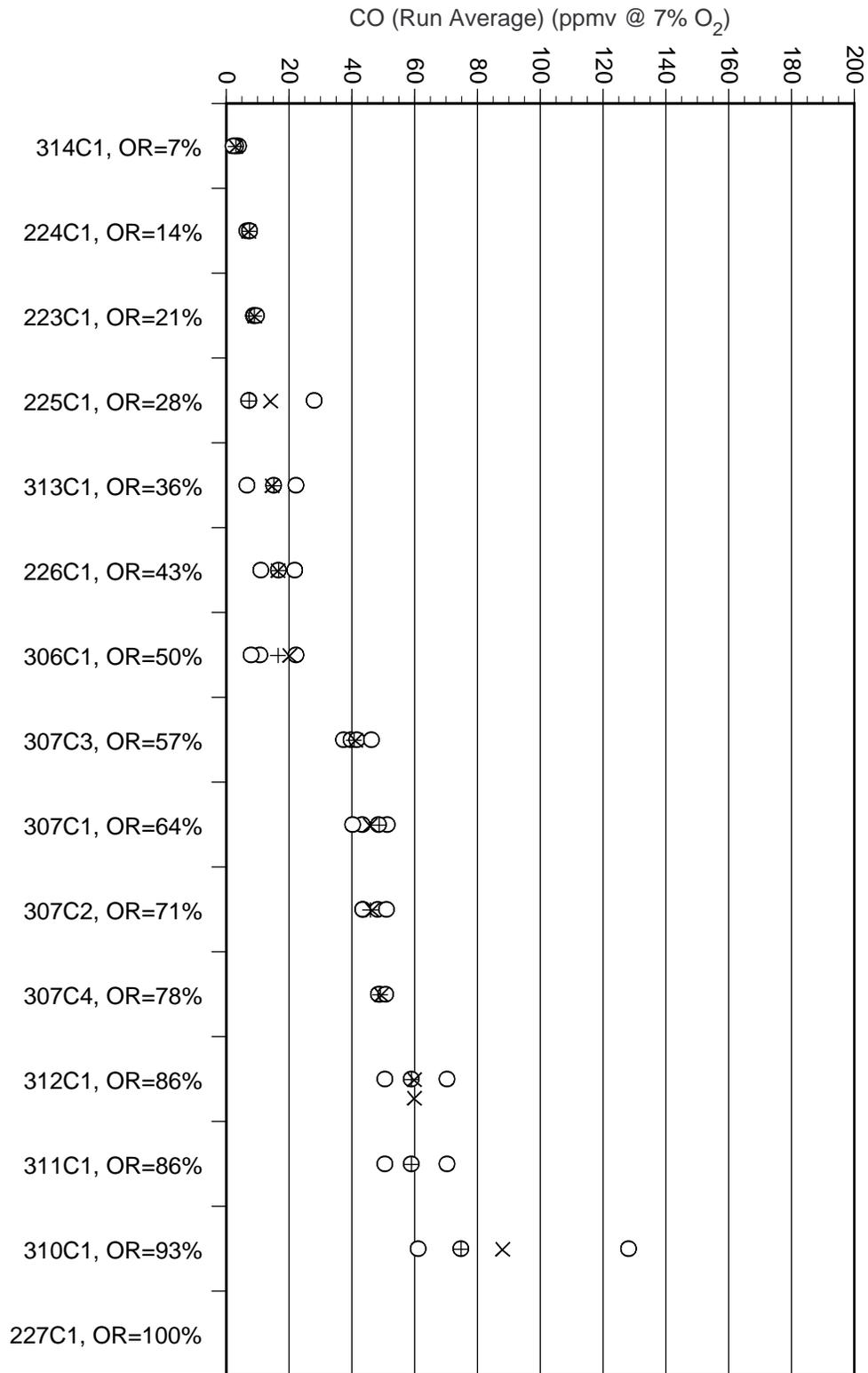
CO (RA) -- Incinerators -- Entire Universe -- 2 of 2

CO (Run Average) (ppmv @ 7% O<sub>2</sub>)



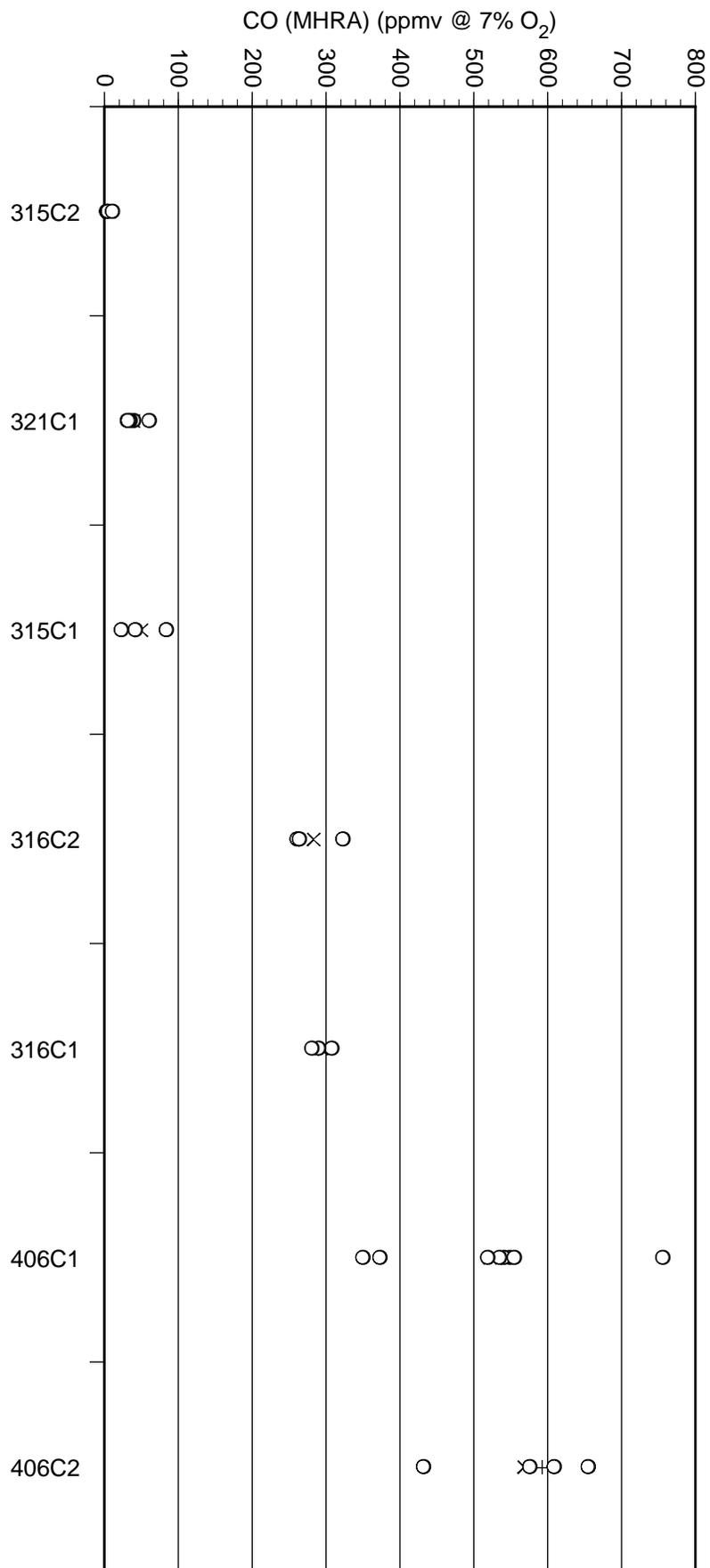
CO (MHRA) -- LWAKs -- Entire Universe



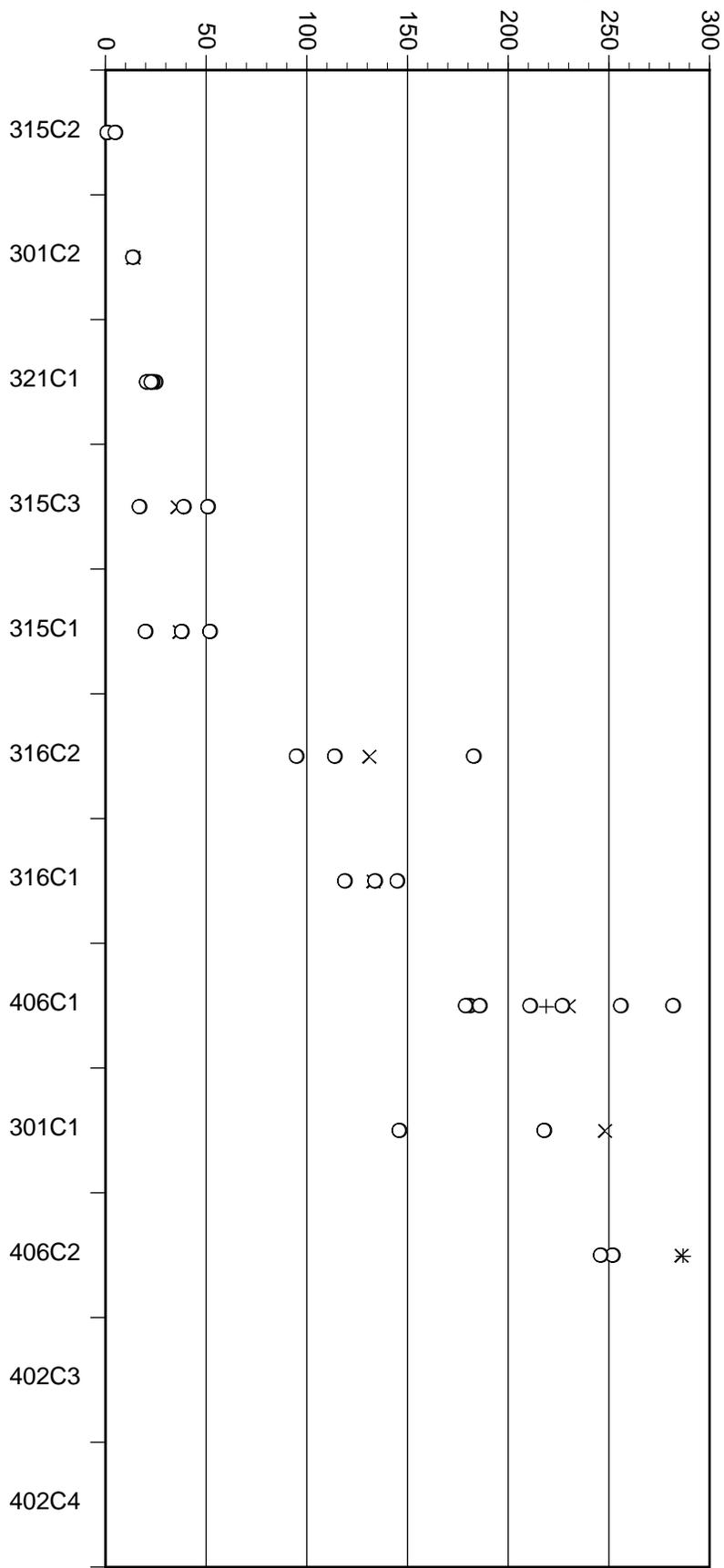


CO (RA) -- LWAKs -- Entire Universe

CO (MHRA) -- Cement Kiln Bypass -- Entire Universe

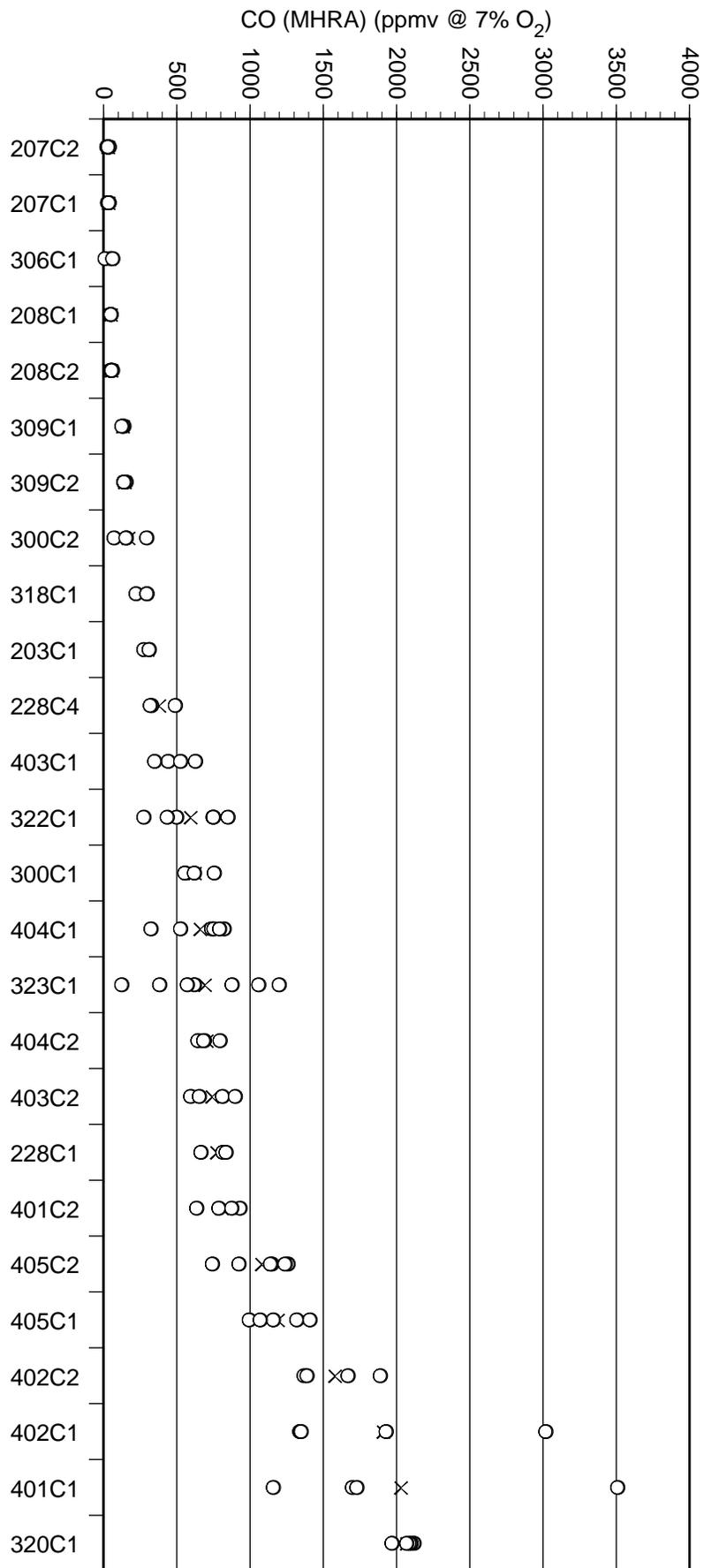


CO (Run Average) (ppmv @ 7% O<sub>2</sub>)

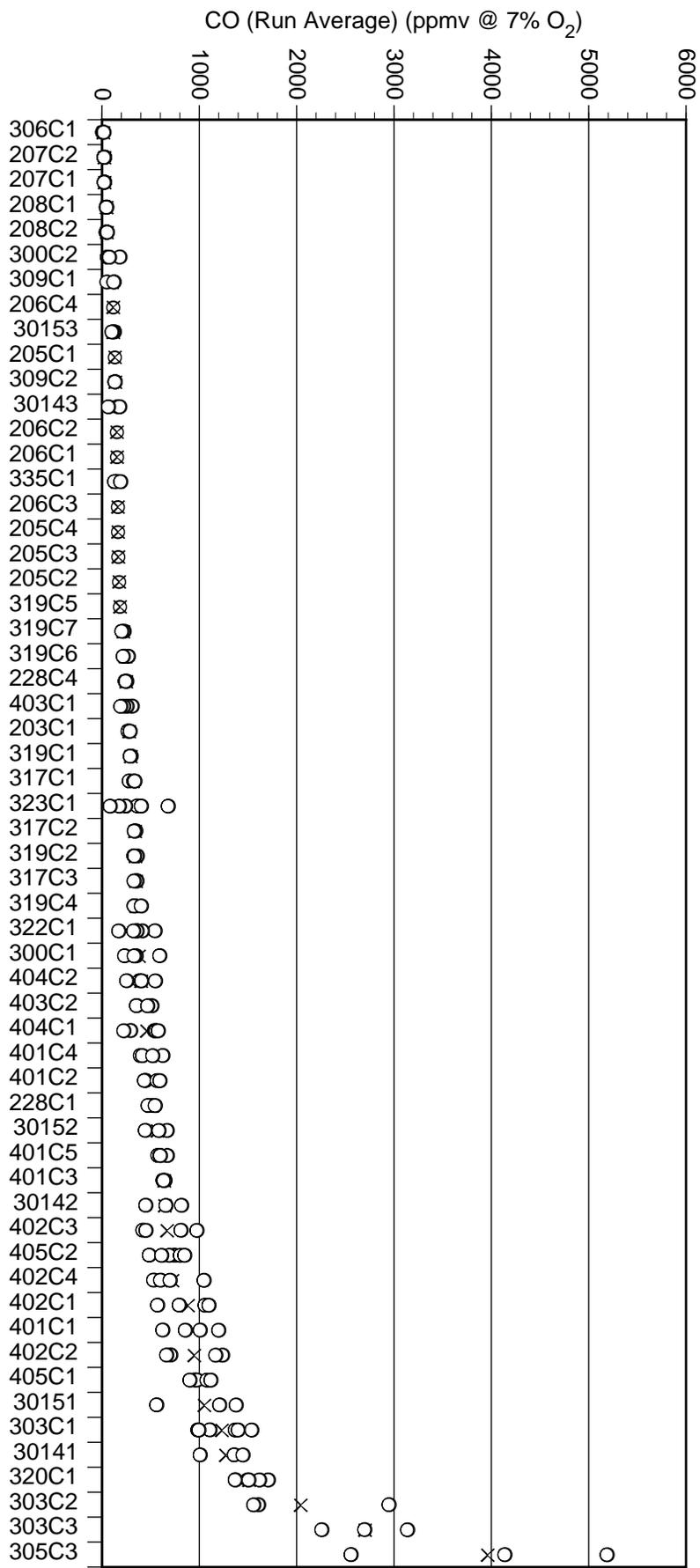


CO (RA) -- Cement Kiln Bypass -- Entire Universe

CO (MHRA) -- Cement Kiln Main -- Entire Universe



# CO (RA) -- Cement Kiln Main Stack -- Entire Universe



# CO (RA) -- Cement Kiln Main Stack -- Entire Universe

